CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, October 26, 1911.

CONTENTS.

CONSTRUCTION:
Railways 187
Electric Railways 187
Light and Power Plants 188
Bridges 188
Buildings 189
Water Supply and Irrigation.... 190
Sewerage 191
Streets and Roads 191
Manufacturing Plants 192
Miscellaneous Contracts 193
Contract Prices 195
Plans and Specifications on File. 194
List of Contracts Pending...... 194
EXAMINATIONS 195
INDUSTRIAL NOTES 196
TRADE PUBLICATIONS 196
PROPOSALS 196

RAILWAYS.

*(*Denotes that this work is advertised in Engineering News.)*

Maine.—Maine Central R. R.—It is reported that this line will be extended from Rockland to Belfast. This, with another extension of six miles from Belfast to Searsport, will make a complete connection to Bangor.

New York.—Long Island R. R.—A contract for the elimination of grade crossings on the Port Washington branch of the Northside Division of the Long Island R. R. has been awarded to P. H. CLEMENTS & CO., Philadelphia, Pa. The cost will be about $2,000,000 for the two miles of improvement.

New York.—Delaware & Northern Ry.—This company has been incorporated to build a steam railroad. The incorporators are: A. M. Moreland, Pittsburgh, Pa.; J. T. O'Dell and A. I. Elkus, New York, N. Y.

New Jersey.—Pennsylvania R. R.—It is reported that the Pennsylvania R. R. Co. has agreed to elevate its tracks through Rahway. Additional right-of-way is being purchased to build two more tracks, six in all, on some parts of the New Jersey division. A. C. Shand, Philadelphia, is Ch. Engr.

Pennsylvania.—Pennsylvania & Northern R. R.—This company has been chartered for the purpose of building a line between Halton and Clarion. H. Buckingham, Clarion, is Pres.

Virginia.—Norfolk & Western R. R.—This company is planning to spend $500,000 on improvements on its Cincinnati division. The line is to be double-tracked between Portsmouth and Clare. A number of heavy grades will be reduced and many curves eliminated. A. C. Needles, Roanoke, Va., is Gen. Supt.

West Virginia.—Steve Creek R. R.—A charter has been granted to this company to build a road from Wire Bridge to Grantsville. The incorporators are: C. Gross, Elkins; G. W. Vanhorn, Wire Bridge; E. B. Templeman, Clarksburg.

North Carolina.—Raleigh, Charlotte & Southern Ry.—The Duncan Syndicate, Greensboro, has taken over the charter of this company and will start work on the construction of the road. The line, which will be about 114 miles long, will run from Raleigh by way of Pittsboro, Asheboro and Albemarle to Charlotte.

✚Georgia.—Santa Fe, Prescott & Phoenix R. R.—This company has awarded a contract for the grading of 38 miles of railroad bed from Cedar Glade to Jerome, to the L. J. SMITH CONSTRUCTION CO., Kansas City.

Mississippi.—Memphis & Pensacola. R. R.—Plans for the early construction of the Memphis & Pensacola R. R., a proposed line from Pensacola via Meridian and Helena, Ark., to Memphis, are nearly completed, according to the report of the committee at Meridian.

Michigan.—Grand Trunk R. R.—The Grand Trunk officials have made an agreement according to press reports, with T. W. Hubbard, Bad Axe., to construct a branch line from Bad Axe to either Owendale, Cars City or Wilmot.

Arkansas.—The Pine Bluff & Northern R. R.—This company is considering the construction of a line which will give Pine Bluff connection with the Rock Island R. R. north of Pine Bluff.

Texas.—St. Louis, Brownsville & Mexico R. R.—It is officially announced at headquarters of this company that the branch line which runs from Bloomington to Port O'Connor will be extended north to Victoria, 20 miles. From Victoria it is planned to run the line to Smithville, about 50 miles. The proposed extension will connect with the Missouri, Kansas & Texas at Smithville.

British Columbia.—J. D. McArthur has obtained a charter for the construction of a new railroad in the Canadian Northwest. It will run from Edmonton, Alberta, to Fort George, B. C., by way of Pine River Pass.

ELECTRIC RAILWAYS.

(✚Denotes a contract awarded.)

Beverly, Mass.—A franchise has been granted to the Boston & Eastern Electric R. R. Co. by the Aldermen in Beverly and Salem. Application has been made in Lynn for a franchise. Noted Sept. 28.

✚New Haven, Conn.—A contract has been awarded by the Shore Line Electric Ry. to the CAVANAUGH-McCAFFREY CO., Boston, to build an extension between Ivoryton and Deep River. Preliminary work has been started. It is reported that this line will be extended to Chester as soon as the right-of-way can be obtained.

East Orange, N. J.—The Public Service Ry. Co. has received a franchise to construct a line on N. Park St., which will connect the Dodd St. line with the end of the Valley Rd. line at Ridgewood Ave. and N. Park St. This is a single-track line, 2,300 ft. long, and work will be started before the first of the year. J. A. Pearson, Philadelphia, is Pur. Agent.

Hermine, Pa.—The Irwin-Hermine Traction Co. contemplates building two extensions, one from its terminus at Hermine by way of Madison, Arona, Adamsburg, Manor, Shafton, Sheridan Terrace to Irwin. The second extension begins at a point on the right-of-way owned by the company at Madison Station, Hempfield Township, thence south to Madison and Yukon.

Philadelphia, Pa.—A charter has been granted to the Snyder Avenue Street Ry. Co. to construct and operate a street railway on Snyder Ave., 7.66 miles. Charles O. Kruger is Pres. The new company is probably connected with the Philadelphia Rapid Transit Co.

Pittsburgh Pa.—The West Penn Rys. Co. plans to expend $2,000,000 on improvements and extensions of its lines in western Pennsylvania, including an extension from Greensburg to New Alexandria and from New Alexandria to Latrobe; also an extension from West Newton and Scott Haven. Rights-of-way have been secured and it is reported surveys are being made. J. L. Fritsch, Connellsville, is Ch. Civil Engr.

Hallton, Pa.—Application has been made for a charter by the Pennsylvania Northern R. R. Co. for a railway from Hallton to Clarion, about 50 miles. H. Buckingham, Clarion, is Pres.

Spring City, Pa.—A franchise has been applied for in Spring City by the Pottstown & Reading Street Ry. This is part of a plan to build a line between Spring City and Sanatoga.

West Baltimore (Lansdowne post-office), **Md.**—A franchise has been applied for by S. J. Healy and associates to build a line in West Baltimore.

Moundsville, W. Va.—The Wheeling Traction Co. is planning an extension from Moundsville to Barton and St. Clairsville. G. O. Nagle, Wheeling, is Gen. Mgr.

Spartanburg, S. C.—The Greenville, Spartanburg & Anderson Ry. Co. has applied for a franchise over certain streets. W. J. Thrakston, Greenville, is Pres.

Hopkinsville, Ky.—The Kentucky-Tennessee Traction Co. is planning to build a line between Hopkinsville and Guthrie.

Cincinnati, Ohio.—An application for a franchise has been made by the Cincinnati Traction Co. to extend its line on Avondale St. to Bond Hill. Thomas Elliott, Traction Bldg., Cincinnati, is Ch. Engr.

Red Oak, Iowa.—The Red Oak & Northwestern Ry. Co., recently incorporated, proposes to build a line between Red Oak and Des Moines. George C. Bolean, Red Oak, is Pres.

✚Minneapolis, Minn.—The Electric Short Line R. R. has awarded a contract to GEORGE TURNHAM & CO. for grading three miles of its line connecting Minneapolis, Medicine Lake and Wayzata.

Sherwood (Iron post-office), **Minn.**—The Cuyuna Northern Ry. Co., recently incorporated, contemplates building a railway from Sherwood, in Saint Louis County, to a point on the Mississippi River in Crow Wing County. The incorporators are Cuyler Adams, F. S. Adams and C. C. Adams, all of Deer Wood.

Winona, Minn.—The Winona Ry. & Light Co. will expend about $20,000 for improvements to its lines in Winona. E. Kirchner, Winona, is Ch. Engr.

Cherryvale, Kan.—The Public Utilities Commission has granted a franchise to the Union Traction Co. to build an extension from Cherryvale to Parsons. D. H. Siggens, Coffeyville, is Gen. Mgr.

Wichita, Kan.—The Arkansas Valley Interurban Ry. Co. contemplates building a 40-mile line from Wichita along the Arkansas River to Winfield. There is a prospect that the line may be continued south to Oklahoma City, Okla. A. O. Boyle, Wichita, is Gen. Mgr.

Valentine, Neb.—The Iowa, Nebraska & Dakota Ry. Co. has been incorporated in South Dakota, with $500,000 capital, for the purpose of constructing a 225-mile railway between Valentine, Neb., and Sioux City, Iowa. The estimated cost is $10,000,000. The line will run along the Niobrara River and the water of this and the Kayapaha River will be used for power. The incorporators are: C. H. Cornell and J. H. Bachelor, of Valentine, Neb., and A. P. Edgar, Glenn W. Martens and others, of Pierre, S. Dak.

Pierre, S. Dak.—The Iowa, Nebraska & Dakota Ry. Co. has been incorporated in South Dakota, with $500,000 capital, for the purpose of constructing a 225-mile railway between Valentine, Neb., and Sioux City, Iowa. The estimated cost is $100,000,000. The railway will run along the Niobrara River and the water of this and the Keyapaha River will be used for power. The incorporators are C. H. Cornell and J. H. Bachelor, of Valentine, Neb., and A. P. Edgar, W. Martens and others, of Pierre, S. Dak.

Devils Lake, N. Dak.—An electric railway is being planned by R. F. McDougall and associates connecting Devils Lake, Greenwood and Chautauqua.

Polson, Mont.—The Flathead Power & Traction Co. has been incorporated to build a railroad from Polson to Dixon, about 30 miles. A power plant will be built on Hell Roaring Creek in the Mission range, it is stated. F. L. Gray, G. R. M. Stritzel, T. R. Arnold, F. E. Faucett, M. A. Myhre and A. W. Pipes, all of Polson, are the incorporators.

Greenville, Tex.—The Mansfield Engineering Co., Indianapolis, Ind., has been retained to make a report on an interurban line from Clarksville and Paris, Tex., through Greenville to Dallas, and from Sherman by way of Wolf City, to Greenville, Tex. Joseph F. Nichols, Greenville, Tex., is interested.

Temple, Tex.—A syndicate of Dayton, Ohio, men headed by Dr. S. F. George is considering constructing an interurban electric railway between Temple and Marlin, about 30 miles. The promoters ask a bonus of $75,000 from the people on the route.

Sherman, Tex.—A committee has been appointed to take charge of the work in connection with the construction of an interurban electric line between Sherman and Greenville, and between Sherman and Gainesville. The committee is C. B. Dorchester, E. B. Caraway, D. B. Lyon, C. C. Mayhew and Joseph Etter.

✚San Antonio, Tex.—The San Antonio Traction Co. has awarded a contract to the HAGELSTEIN & DICKINSON CO. for the extension of its lines in northwest San Antonio.

Dallas, Tex.—A franchise has been applied for by the Southern Traction Co., Dallas, to build a line within the city limits. This is part of the proposed line connecting Dallas, Waco, Hutchins, Ferris, Waxahachie, Milford, Hillsboro and Forreston. J. F. Strickland is Pres.

Phoenix, Ariz.—A franchise has been applied for by the Salt River Valley Electric Ry. Co. in Phoenix, for permission to build a 60-mile railway connecting Phoenix, Ingleside, Scottsdale, Tempe, Mesa, Chandler, Alhambra, Glendale and Peoria. F. M. Winter, Phoenix, is Pres. Noted Aug. 10.

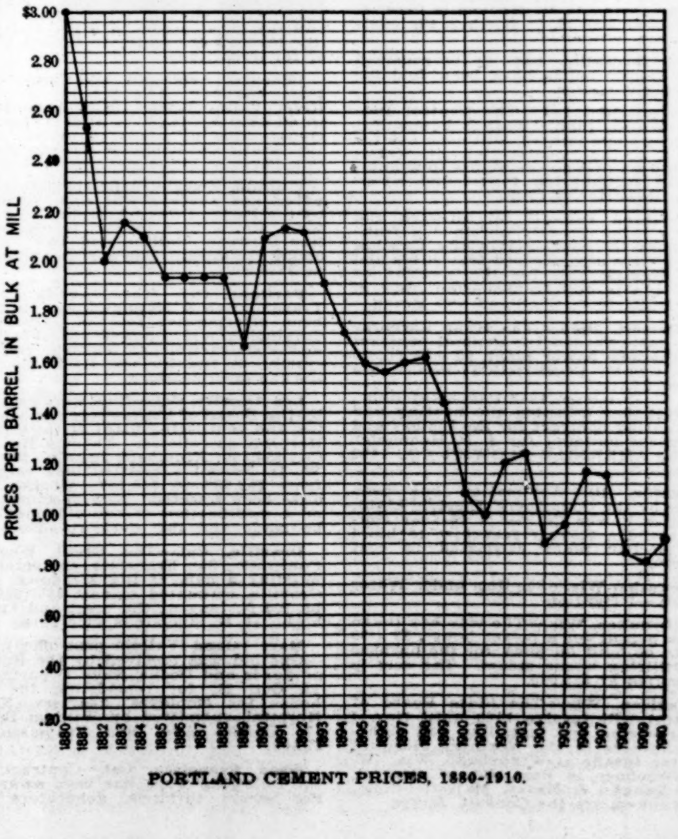
Tucson, Ariz.—The Tucson Rapid Transit Co. is planning a 1-mile extension from the University gate to and along the Speedway.

Aberdeen, Wash.—The City Council has passed an ordinance granting the Grays Harbor Ry. & Light Co. a franchise to extend its tracks on B St. as far as Sixth Ave. J. S. Thornton is Gen. Mgr.

Production and Price of Portland Cement.

The rapid growth of the Portland cement industry in this country has been accompanied by a continued drop in price, which has already established low levels that were unthought of even a decade ago. The average price in bulk at the mill during 1910 was, according to a report by the United States Geological Survey, 89.1 cts. per bbl. and this year a much lower price will be established.

In 1910 over 76,500,000 bbls. were produced, a high record. In the Lehigh Valley district the production was also the largest on record but the percentage of output in that district was the smallest on record, being 34.3%. The highest percentage as far as records for the past 20 years are concerned, was in 1897, when were produced 2,002,059 bbls. or 74.8% of the total output. In the accompanying chart is shown the average price per bbl. in bulk at the mill.



PORTLAND CEMENT PRICES, 1880-1910.

Los Angeles, Cal.—A franchise has been granted to the Los Angeles Ry. Co. to cross El Monte Road and to build through Elysian Park. G. J. Kuhrts, Sixth and Main Sts., Los Angeles, is Ch. Engr.

Oakland, Cal.—The Oakland Traction Co. is planning to extend its Oakland Ave. line from Linda and Piedmont Aves. along 41st or 42d Sts., to the waterfront.

✚Sacramento, Cal.—Contracts have been awarded by the Sacramento-Woodland R. R. Co. for the construction work on two sections of its proposed line. One has been awarded to THE DOZIER CONSTRUCTION CO. and the other to COOPER & HAWLEY.

The Vallejo & Northern Ry. has secured right-of-way for the construction of a line betwen Sacramento and Woodland.

San Jose, Cal.—C. P. Anderson has applied to the supervisors for a franchise to operate by gas or electricity a standard gage railway in the County of Santa Clara. H. A. Pfister is Clk.

Stockton, Cal.—The Sierra & San Francisco Power Co. will expend about $200,000 in Stockton, which will include an auxiliary plant to protect their patrons in case their hydro-electric plant on the Stanislaus River should temporarily fail.

Oakland, Cal.—Surveys have been made by the San Francisco, Oakland & San Jose Ry. for the construction of the last section of the line between Oakland and San Jose. E. A. Heron, 1218 Broadway, Oakland, is Pres.

Brantford, Ont.—It is reported here that a merger of the Grand Valley Ry. and the Brantford Street Ry. lines into a system of electric roads, to extend from Toronto to Detroit, is contemplated.

London, Ont.—The London Street Ry. is planning extensive improvements for its lines in London. About $1,000,000 will be expended, it is stated.

LIGHT AND POWER PLANTS.

(**Denotes that this work is advertised in Engineering News.*)

Portland, Me.—Bids will be received by the City Hall Building Commission until Nov. 9 for lighting fixtures for the City Hall. Carrere & Hastings, 225 Fifth Ave., New York, N. Y., are the Archs.

✚Norway, Me.—A contract has been awarded by the Norway & Paris Street Ry. Co., to C. E. HOXIE & CO., Augusta, Me., for the construction of a concrete dam at the outlet of the Pennesseewassee Lake.

Boston, Mass.—The following bids were received Oct. 18 by the Supply Department for 11,000 gas mantle lamps for street lighting: United Gas Light Manufacturing Co., 90 cp., $6.40; Ehrich & Gratz, Berlin, Germany, 120 cp., $4.60 plus the 45% duty, or $6.67 net; Novelty Mfg. Co., New York, 60 cp., $6. No award. J. Edw. Mullen is Supt. Supply Dept.

✚Beverly, Mass.—The Beverly Gas & Electric Co. has awarded a contract to MACK BROS., Salem, Mass., for the erection of garage, generator house, purifier house and meter house. Charles T. Main, Boston, is Engr. Noted Oct. 12.

Wallingford, Conn.—New bids will be asked during the next six weeks for additional equipment, consisting of a 500-KW. turbine and other electrical equipment, estimated to cost $30,000, to be installed at the municipal electric light plant. A. L. Pierce is the Designing Engr.

Amsterdam, N. Y.—The Hudson River Electric Light & Power Co. has been granted permission to build transmission lines to Amsterdam, Akin, Mohawk, Florida and Ft. Hunter.

Geneva, N. Y.—Improvements, including the installation of a 520-HP. boiler are contemplated by the Central New York Gas & Electric Co. An expenditure of $40,000 will be made. A. B. Wainwright is Mgr.

Buffalo, N. Y.—See item under Miscellaneous Contracts—Cable Subway, Buffalo, N. Y.

New York, N. Y.—Bids will be received by the Department of Health 55th St. and Sixth Ave., Borough of Manhattan, until 10 a. m., Nov. 9, for furnishing and erecting a new boiler house extension and pipe tunnel system at the Riverside Hospital, at North Brother Island, Borough of the Bronx, New York.

Bids will be received by the Police Commissioner, Police Department, at the Bookkeeper's office, Headquarters of the Police Department, 240 Centre St., Borough of Manhattan, in The City of New York, until 10 a. m., Nov. 3, for making and completing repairs to the heating systems of the 1st, 2d, 5th, 6th, 8th, 9th, 10th, 12th, 14th, 15th, 16th, 17th, 19th, 21st, 22d, 23d, 25th, 26th, 28th, 29th, 31st, 32d, 35th, 36th, 39th, 40th and 43d Precincts and 300 Mulberry St., in the Borough of Manhattan; 61st, 63d, 65th, 66th, 68th, 74th, 77th and 79th Precincts in the Borough of the Bronx; 80th and 81st Precincts in the Borough of Richmond; 143d, 144th, 145th, 146th, 147th, 148th, 149th, 151st, 152d, 153d, 154th, 155th, 156th, 157th, 158th, 159th, 160th, 161st, 162d, 163d, 164th, 165th, 167th, 168th, 169th, 170th, 171st, 172d, 174th and Bridge "C" Precincts and 269 State St., in the Borough of Brooklyn; 274th, 275th, 276th, 277th, 281st, 282d, 285th, 290th and 292d Precincts in the Borough of Queens. Plans are on file at the above office. R. Waldo is Comr.

Bids will be received by the Commissioner of Correction, at the Department of Correction, 148 East 20th St., until 11 a. m., Oct. 31, for a new heating system in the Seventh District Prison, West 53d St. Further information may be obtained at the office of the Department of Correction. Patrick A. Whitney is Comr.

✚Philadelphia, Pa.—A contract for the construction of additions to the power plant in connection with the factory of Lit Bros., at 21st St. and Washington Ave., has been awarded to JOHN N. GILL & CO.

Pittsburgh, Pa.—Bids will be received by the City Comptroller until Oct. 27 for the work in connection with laying a conduit line in Carson St., between South Tenth and 24th Sts. W. A. Magee is Mayor.

✚Reading, Pa.—The Curtis & Jones Co. has awarded a contract to W. E. BRIDEGARN for the installation of 70 motors, also to install a lighting system in new addition of its factory, including 700 Magda lights.

Danville, Va.—The city officials have decided to build the electric light plant for which a bond issue was voted on July 11. The cost is estimated at $150,000.

New Orleans, La.—Bids will be received until Nov. 7, by F. S. Shields, Secy., at the office of the Sewerage and Water Board, 508 City Hall Annex, New Orleans, La., for furnishing and installing the following machinery: One 6,000-KW. horizontal, high-pressure, condensing steam turbine and alternating-current unit; one 150-KW. rotary converter with stationary transformers and one 7-panel switchboard. Specifications may be obtained at the office of the Board. George G. Earl is Supt.

Decatur, Ala.—The construction of an electric light plant, estimated to cost $50,000, is contemplated.

Louisville, Ky.—Preliminary plans have been prepared by Clarence Parsons, a former city engineer, and submitted to Mayor W. O. Head for a canal around the city by which a 25-ft. fall of the Ohio River may be utilized to generate electricity.

Columbus, Ohio.—Bids will be received by H. S. Holton, Dir. Pub. Ser., until Oct. 27, for a cluster lighting system to be installed in a section of the city and to furnish and deliver 886 ornamental c.-i. standards.

Wooster, Ohio.—Bids will be received by the Ohio Agricultural Experiment Station until noon, Oct. 27, for the construction of an addition to its power house. Plans and specifications may be seen at the office of the Director at the Experiment Station. Charles E. Thorne, Wooster, is Dir.

Anderson, Ind.—The Indiana Service Co. has been recently incorporated, and it is reported, is preparing to let contracts to enlarge the plant at Anderson and construct gas, electric light, heat and water plants in Shelbyville, Elwood, Rushville, Connersville, Batesville, Tipton and Nowlesville. The plan is to lay pipe lines and to build transmission lines from Anderson to the cities named. C. W. Hooven is Pres. A. W. Wilson and H. D. Hughes, Philadelphia, are interested.

Crawfordsville, Ind.—It is reported that $25,000 bonds have been sold for lighting purposes.

Francisville, Ind.—The Central Indiana Water, Light, Heat & Power Co., recently incorporated, will soon ask for bids for the construction of water, light, heat and power plants in a number of neighboring towns and cities. E. A. Rossitter is Pres.

Kentland, Ind.—R. W. Howard and others, who recently obtained a franchise for the construction of a lighting plant, have also secured franchises and will receive bids for the erection of local plants and transmission lines in and to Sheldon, Goodland and Brook.

✚Detroit, Mich.—The Hupp Corporation has awarded the general contract for the new power plant, 60 × 76 ft., to the RUTLEY CONSTRUCTION CO., 544 Concord Ave.

R. E. Roseman, 1302 Penobscot Bldg., Detroit, has awarded the heating and ventilating contract for the 7-story and basement building for J. P. Hemmeter to the AMERICAN BLOWER CO., 1400 Russell St.

Paxton, Ill.—Application has been made by the Consumers' Electric Light, Heat & Power Co. for a 10-year contract and a 30-year franchise to build an electric plant estimated to cost $75,000.

Menasha, Wis.—See item under Water supply—Irrigation.

Milwaukee, Wis.—The city has taken out a permit for a power house, 39 × 39 ft., to be built on piles, for the purpose of utilizing waste steam. The cost is estimated at $59,000.

Madison, Wis.—The State Board of Control will receive bids until Nov. 1 for rewiring and installing new lighting fixtures in the Northern Hospital for the Insane at Winnebago, Wis. W. H. Graebner is Pres. Bd. of Control, and Vaughn & Meyer, Majestic Bldg., Milwaukee, are the Consult. Engrs.

Milwaukee, Wis.—The city of Milwaukee will soon ask for bids on 309 street lamps. The Welsbach Standard Light Co. has a contract which will expire Dec. 15. Harry E. Briggs is Comr. Pub. Wks.

Pocahontas, Iowa.—Bids will be received until 2 p. m., Oct. 27, by George Schneider, City Clk., for work, estimated to cost $30,000, for an electric light plant. Oscar Claussen, Engineering Co., St. Paul, Minn., is in charge of the engineering work.

Des Moines, Iowa.—The Des Moines Central Heating & Power Co. has decided to rebuild its plant. W. H. Schott is Pres.

Glidden, Iowa.—A municipal electric light plant is contemplated to cost approximately $10,000. Bids will probably be asked for within a few weeks. H. W. Porter is Mayor.

✚Prairieburg, Iowa.—A contract has been let to the KEYSTONE DRILLER CO., Monadnock Block, Chicago, Ill., for one single-acting double geared deep well pump.

Morris, Minn.—Plans have been prepared for a lighting plant, estimated to cost $15,000. J. H. McGuire and others are interested.

Duluth, Minn.—See item under Water Supply—Irrigation.

✚Finley, N. Dak.—The Finley Light & Power Co. has awarded a contract to the BATTERY CO., Milwaukee, Wis., for the erection of an electric plant.

Bryan, Tex.—The City Council has made arrangements for issuing $7,000 electric light bonds and $5,000 sewer bonds and $8,000 water-works bonds, the proceeds of which will be spent for improvements.

Cameron, Tex.—Improvements, estimated to cost $18,000 will be made by the Cameron Water Power & Light Co. This company has recently taken a contract to supply the city with light and water for 20 years.

Yoakum, Tex.—An electric light plant will be installed by the Creamery Dairy Co., and it is reported that work will be started in the near future.

Midland, Tex.—The City Council has contracted with the Midland Light Co. for the installation of a number of additional lights. The plant will be improved, it is stated.

Custer City, Okla.—The Western Engineering Co. is preparing plans and specifications for electric light plant and water works. The cost is estimated at $40,000.

Grove, Okla.—The Western Engineering Co. is preparing plans and specifications for an electric light plant and water-works system. The cost is estimated at $35,000.

Tecumseh, Okla.—The Rapid Transit Transmission Co. will build a line from Tecumseh to Sulphur. E. G. Graham, Muskogee, is Ch. Engr.

✚Muldrow, Okla.—A contract for a municipal electric lighting system, for which bids were opened Oct. 10, has been awarded to F. R. STONE, Oklahoma City, Okla. The Western Engineering Co. is in charge of the engineering work.

Douglas, Ariz.—The Douglas Improvement Co. is considering a plan to enlarge its electric power plant here and the construction of a transmission line through the valley to furnish power for irrigation.

Phoenix, Ariz.—An additional contract has been awarded by the Salt River Valley Water Users Association to OLSEN & GRAF, at $22,922, for the construction of power plant No. 2 on the South Consolidated Canal. Noted Oct. 12.

Wallula, Wash.—Plans are being prepared and surveys will soon be made by the Pacific Power & Light Co., Portland, for a high power transmission line between Wallula and The Dalles, about 130 miles. The cost is estimated at $375,000.

Portland, Ore.—The Ewbank Power Transmission & Motor Co. has recently been incorporated for the purpose of developing water power near Portland and constructing an electric railway system. G. Staples and H. B. Ewbank are the incorporators.

Los Angeles, Cal.—Bids were received by the Board of Supervisors for a heating and ventilating plant at the County Hospital as follows: Thomas Hoverty Co., $53,800; Klumoe & Jay Co., $52,049; W. D. Nowell submitted bids ranging from $52,032 to $45,200. All the bids have been rejected. New specifications or a modification of the old ones will be made and the work re-advertised.

Oroville, Cal.—The Great Western Power Co., San Francisco, contemplates building a dam at Big Meadows, near Oroville, estimated to cost $750,000, to be 700 ft. long at the crest and 110 ft. high. H. H. Sinclair is Vice-Pres.

Mare Island (Vallejo post-office), Cal.—One bid was received by the Bureau of Yards and Docks, Navy Department, on Oct. 21, for remodeling the gas house for employes' quarters, Naval Hospital, submitted by William Bruce, 474 Duboce Ave., San Francisco, at $7,900.

✚San Francisco, Cal.—Contract for the following work has been awarded: For steam turbines, generators and main switchboard in the power house and laundry building of the San Francisco Hospital to FREDERICK C. ROBERTS & CO., at $25,198; for boilers, boiler room auxiliaries and piping to ROBERT DALZIEL, JR., at $52,397. Noted Sept. 14.

✚Tulare, Cal.—The Tulare County Power Co. has awarded a contract to the HUNT-MIRT & CO., San Francisco, for a 3,000-HP. steam turbine.

Ottawa, Ont.—Bids will be received at the office of the Commissioners of the Transcontinental Railway, at Ottawa, until noon, Nov. 8, for the construction and erection complete of the following: two 150-HP. horizontal return tubular boilers at Napadogan, N. B., Mile 118; two 150-HP. horizontal return tubular boilers at Edmundston, N. B., Mile 230; two 150-HP. horizontal return tubular boilers at Cochrane, Ont., Mile 1037. Plans and specifications may be obtained at the office of W. J. Press, Mechanical Engr., Ottawa, Ont. P. E. Ryan is secy.

✚Calgary, Alta.—The Calgary Power Co., 179 St. James St., Montreal, has awarded a contract for 40,000 tons of line pipe to the NATIONAL TUBE CO., Pittsburgh, Pa., at $2,500,000. Mains will be constructed from Bow Island to Calgary, Macleod, Claresholm, Granum, Stavely, Nanton, High River and Okotoka. Smith, Kerry & Chase, Toronto, are the Engrs. and Contractors.

Winnipeg, Man.—Bids will be received until Nov. 3 by the city of Winnipeg for furnishing incandescent carbon and tungsten filament lamps. Specifications may be obtained at the office of the General Manager of the Light and Power Department, 449 Main St., Winnipeg. M. Peterson is Secy. Bd. Control.

BRIDGES.

(✚*Denotes a contract awarded.*)

Boston, Mass.—Bids will be received until Nov. 13 by the Public Works Department for building a draw span pile bridge at Meridian St., from East Boston to Chelsea. Louis K. Rourke is Comr. Pub. Wks.

✚Hartford, Conn.—The contract for the construction of a plate girder bridge over Park River has been awarded by the Board of Contract and Supply to the BERLIN CONSTRUCTION CO., Berlin, Conn., at $4,523. Other bidders were: Levering & Garrigues Co., New York, $4,825; United Construction Co., Albany, N. Y., $4,392; Eastern Bridge & Structural Co., Worcester, Mass., $4,900. Noted Oct 12.

Buffalo, N. Y.—We are officially advised that the Government, Lieut.-Col. J. G. Warren, Corps of Engineers, U. S. A., Buffalo, has accepted plans prepared by the Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago, Ill., for a 165-ft. single leaf highway span over Black Rock Channel at Ferry St., Buffalo.

Jersey City, N. J.—Bids will be received by the Joint Committee of the Boards of Chosen Freeholders of the Counties of Hudson and Essex until 11 a. m., Nov. 2, for constructing a highway bridge over the Passaic River on the line of Bridge St., between the city of Newark, Essex County, and the town of Harrison, Hudson County, and the erection and maintenance of a temporary bridge pending the construction thereof. Patrick J. Condon is Chn. Com.

Allentown, Pa.—Press reports state that a bridge 1,900 ft. long will be erected by the Lehigh Valley Transit Co. over the Little Lehigh River, between Allentown and South Allentown. Estimated cost, $400,000. W. W. Wysor, Allentown, is Ch. Engr.

Lancaster, Pa.—Bids have been received by the Water Committee for a 3-span plate girder bridge over the new dam being erected at the pumping station. The bids were for bridges 9 ft. or 18-ft. wide structures, and were as follows: Nelson-Meredith Co., Chambersburg, $5,994 and $7,900; York Bridge Co., $6,500 and $8,000, superstructure only; Lancaster Machine & Structural Works, $6,588 and $8,435; Schuylkill Construction Co., Philadelphia, $3,910 and $5,290.

Pittsburgh, Pa.—Bids will be received by R. J. Cunningham, County Controller, until noon, Oct. 27, for the construction of a wooden Howe Truss Bridge at the site of Bridge No. 1, Turtle Creek.

Washington, Pa.—Bids will be received by John H. Moffitt, County Controller, until noon, Nov. 13, for constructing a 20-ft. span reinforced-concrete bridge and reflooring two bridges. Chaney & Armstrong are the County Engrs.

..**Jonesville, Va.**—Bids will be received by the Chairman of the Board of Supervisors until 11 a. m., Nov. 3, for constructing steel bridges in Lee County, as follows: 152-ft. structure over Powells River, about one mile from Olinger, on the Louisville & Nashville Ry.; 178-ft. structure over Powells River, 1½ miles from Dryden, on the Louisville & Nashville Ry.; 204-ft. structure over Powells River, eight miles from Ben Hur, on the Louisville & Nashville Ry.; 52-ft. structure over Wallin's Creek, eleven miles from Ben Hur, on the Louisville & Nashville Ry.; 37-ft. structure over Cane Creek, one mile from Pennington Gap, on the Louisville & Nashville Ry.; 152-ft. structure over

Powells River, three miles from Pennington Gap on the Louisville & Nashville Ry.; 70-ft. structure over Straight Creek, three miles from Turner's Siding, on the Interstate Ry.; 70-ft. structure over Straight Creek, 1½ miles from Turner's Siding. Plans and specifications are on file at the office of the County Engineer, Pennington Gap, and may be obtained from the Childrey Sunday Co., Richmond. P. St. J. Wilson, Richmond, is State Highway Engr.

Stillwater, S. C.—The contract for constructing a steel bridge over Saluda River at Stillwater has been awarded to AUSTIN BROS., Atlanta, Ga., at $9,026.

Morristown, Tenn.—The City Council of Morristown has authorized the erection of a concrete bridge over Turkey Creek on Main St., to replace the wooden structure.

Toledo, Ohio.—Bids will be received by J. R. Cowell, Dir. Pub. Ser., until noon, Nov. 25, for constructing a two-leaf bascule bridge across the Maume River at Cherry St. Plans and specifications are on file with the Chief Engineer, Dept. Pub. Ser. F. G. Stockton is Secy.

Zanesville, Ohio.—Bids will be received at the office of the Commissioners of Muskingum County until 11 a. m., Nov. 13, for repairing the superstructure of the Third St. swing bridge, Zanesville. H. A. Buerhaus is County Audr.

✚Celina, Ohio.—Contracts for constructing 13 bridges have been awarded as follows: Superstructures, to the BROOKVILLE BRIDGE CO., Brookville, Ohio, and CROGHAN CONSTRUCTION CO., Fremont, Ohio; substructures to H. B. HUGHS, Celina, Ohio, and BAHNERT & FLAYLOR, Burkettsville, Ohio. Noted Sept. 12.

Lisbon, Ohio.—Bids will be received by the Commissioners of Columbiana County, until noon, Nov. 6, for building steel bridge No. 235, Section 22, Salem Township. H. C. McCamon is Pres. and L. M. Kannal is Clk. of Comrs.

Massillon, Ohio.—Bids will probably soon be asked by the Stark County Commissioners, Canton, Ohio, for a 37-ft. single-leaf span over the Ohio & Erie Canal at West Main St., Massillon, Ohio. The Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago.

✚Elkhart, Ind.—The ELKHART IRON & BRIDGE CO. has been awarded contracts for the construction of five bridges in Elkhart County.

Jasper, Ind.—Bids will be received by the Commissioners of Dubois County until 1 p. m., Nov. 14, for the construction of a bridge over White River at Portersville. M. A. Sweeney is County Audr.

✚Plymouth, Ind.—The Marshall County Commissioners have awarded a contract to the ROCHESTER BRIDGE CO. at $5,310 for constructing the Brownlee bridge on Pierce St.

South Bend, Ind.—The Commissioners of St. Joe County have located sites and ordered plans for the construction of three bridges in Union and Madison Township. John W. Harbon is County Audr.

South Bend, Ind.—W. S. Moore, City Engr., has prepared plans for a bridge over the east race at LaSalle Ave. The structure will be 100 ft. long and 82 ft. wide, and will be composed of three 33⅓-ft. piers. Estimated cost, $15,000.

✚Morris, Ill.—A contract for constructing eight bridges at various points along the Illinois & Michigan Canal has been awarded to the JOLIET BRIDGE & IRON CO., Joliet, Ill.

Marble Rock, Iowa.—Bids will be received by the Commissioners of Floyd County at Charles City, until Nov. 15, for constructing a reinforced-concrete bridge 90 ft. long and 25 ft. wide over the ravine crossing the road between Sections 8 and 9, Township 94, Range 17, in Marble Rock. H. B. Rosenkrans is County Audr.

Cedar Rapids, Neb.—Bids will be received at the office of the Clerk of Boone County, Albion, Neb., until Nov. 7, for constructing a bridge across Cedar River, about three-quarters of a mile north of Cedar Rapids. Bids will be received on alternate designs as follows: A 221-ft. bridge, composed of two 112-ft. spans, pin connected high trusses with concrete piers and abutments; a reinforced-concrete arch bridge composed of four 50-ft. spans. D. A. Price, Lincoln, is State Engr.

✚Tucson, Ariz.—Press reports state that the El Paso & Southwestern R. R. has awarded a contract to V. S. Griffith, Tucson, at $75,000, for the construction of culverts, arches and bridges.

Vancouver, Wash.—At a joint meeting of the Commissioners of Cowlitz and Clark Counties, it was decided to construct a bridge over the Lewis River, one-quarter mile above Woodland. Construction will begin in the spring.

Los Angeles, Cal.—The lowest bid received for constructing a concrete bridge on Ave. 21, over Arroyo Seco, was submitted Oct. 16 by Smith & Stahlhuth, at $26,000. Noted Oct. 5.

Holtville, Cal.—Bids will be received by the Board of County Supervisors until 10 a. m., Nov. 6, for constructing a wooden bridge across New River, north of Brawley. M. S. Cook is County Clk.

✚San Diego, Cal.—We are officially advised that the contract for constructing a reinforced-concrete and steel bridge was awarded Oct. 16 to CHAS. STEFFGEN, at $5,600. Other bids were: Brown & Deun, $6,300; John Campbell, $7,160. Noted Oct. 5.

San Anselmo, Cal.—Plans and specifications have been prepared by J. Gardner Mitchell, Monadnock Bldg., San Francisco, for a bridge to be built across the creek at Oak St.

Los Angeles, Cal.—Bids will be received by the Board of Supervisors until 2 p. m., Oct. 30, for constructing two timber and steel bridges, one over the Old San Gabriel River on Washington St., and the other over the Rio Hondo on the Whittier Road. Plans are on file with the Board of Supervisors.

Winnipeg, Man.—We are officially advised that the Department of Public Works of Canada, A. R. Dufresne, Asst. Ch. Engr., Ottawa, Ont., has accepted plans prepared by the Strauss Bascule Bridge Co., Fort Dearborn Bldg., Chicago, Ill., for a 55½-ft. single-leaf highway span over St. Andrew's Lock, near Winnipeg.

BUILDINGS.

(**Denotes that this work is advertised in Engineering News.*)

Bangor, Me.—A high school building, also a public library are planned. Peabody K. Stearns, 53 State St., are the Archs.

Adams, Mass.—Plans are now being drawn for an addition to the Greylock Rest Sanitarium.

✚Boston, Mass.—The contract for the mercantile building at Church and Providence Sts. was awarded to McNEIL BROS., Freeport St., Dorchester, Mass. To be of brick and stone, seven stories, 44 × 28 ft., and cost $100,000. Julius A. Schweinfurth, 35 Congress St., is the Arch.

✚The contract for the storage building to be built on Dedham St. for A. A. Shepard, 409 Albany St., has been awarded to the MACDONALD & JOSLIN CO., 161 Devonshire St. Knight C. Richmond, 10 Weybosset St., Providence, R. I., is the Engr.

A 5-story brick apartment block to cost $150,000 is to be built for Samuel Altman at 722 Commonwealth Ave., Brighton District. To be 100 × 62 × 50 ft. F. A. Norcross, 46 Cornhill, is the Arch.

Cambridge, Mass.—A chemical laboratory, to be known as the Wolcott Gibb Memorial for Harvard University, is to be built on the college grounds. Estimated cost, $100,000. A. W. Longfellow, Tremont Bldg., Boston, is the Arch.

Sub-bids are desired by the main contractors for the Radcliffe College dormitory on Walker St., Cambridge. To be of brick and stone, four stories, 120 × 50 ft. and to cost $70,000. Kilham & Hopkins, 9 Park St., Boston, are Archs.

✚Holyoke, Mass.—The contracts for the apartment block to be built for Stanislaw Dueharme on Maple and Appleton Sts. have been awarded as follows: Iron work, G. HAARMAN & SON; cut stone, A. ARCHAMBAULT; mason work, JOHN J. PREW. Block to be 122 × 55 ft., five stories, of pressed brick. G. P. B. Alderman & Bro. are the Archs.

✚The contract for the library building at Gilbertville has been awarded to CASPER RANGER. To be 71 × 40 ft., of Indiana limestone. F. C' & G. C. Gardner, of Springfield, are the Archs.

✚Lynn, Mass.—The contracts for the school on Redington St. have been awarded as follows: General contract, J. E. SOCATELLI CO., of Boston; heating and ventilating, THE COMMONWEALTH HEATING CO., of Boston; electric work, THE NIXON ELECTRIC CO., of Boston.

Malden, Mass.—An 18-apartment block is to be built for Baizein & Glazer, of Bryant St., Malden. M. F. Burk, 333 Union St., Lynn, is Arch.

✚Marlboro, Mass.—The contract for the Marlboro Hospital to cost $60,000, has been awarded to J. E. WARREN & CO. Bigelow & Dyer, Corey Blk., are the Archs.

Pittsfield, Mass.—A Masonic temple is to be built on South St. for the Pittsfield Masonic Association. Estimated cost, $50,000. J. McA. Vance, 24 North St., is the Arch.

✚Worcester, Mass.—The contract for a $60,000 apartment block to be 96 × 60 ft., with fire stairs of brick, on Lincoln St. and Harrington Ave., for Blanche M. Thompson was awarded to WILLIAM D. THOMPSON, 340 Main St. Charles R. Hoyle, 340 Main St., is the Arch.

Boston, Mass.—A 10-story department store building is to be built for the Gilchrist Co., at Winter St. and Washington St. It will be 160 × 50 ft. C. C. Ferris is Pres.

✚The contract for the garage to be built on Maitland St. for John J. Shea has been awarded to WHITCOMB & KAVANAUGH, 6 Beacon St. It will be 190 × 60 ft. Francis W. Wilson, 131 State St., is the Engr.

A 10-apartment house is to be erected at 30 Ivy St., for the N. E. Construction Co., 53 State St. It will be five stories in height, and 87 × 22 ft. The estimated cost is $30,000. Daniel H. Woodbury, 53 State St., is the Arch.

✚Brockton, Mass.—The contract for the Carnegie Library building to be built on Main St. has been awarded to WILMARTH & McKILLIP, INC., Pawtucket, R. I. It will be of brick and stone, and two stories in height. The estimated cost is $125,000. Nathaniel C. Smith, Merchants' Bank Bldg., New Bedford, is the Arch., in conjunction with F. W. Chandler, Institute of Technology, Boston.

✚Concord, Mass.—The contract for the grammar school to be erected on Stow St. has been awarded to R. D. DONALDSON of Lincoln, Mass. It will be of brick, two stories in height, and 120 × 60 ft. The cost is estimated at $60,000. Derby, Robinson & Shepard, 20 Beacon St., Boston, are the Archs.

Cambridge, Mass.—A warehouse and stable is to be erected for the Standard Oil Co., of New York City. It will be of reinforced concrete, and cost $50,000. F. W. Clark, 26 Broadway, New York City, is the Arch.

Fitchburg, Mass.—A hotel to cost $100,000 is to be built at once on Blossom and Crescent Sts. for John Miran, 274 Robistone St. It will be six stories in height, and 90 × 55 ft. Daniel H. Woodbury, 53 State St., Boston, is the Arch.

✚Springfield, Mass.—The various contracts for the buildings for the Gilbert & Barker plant at West Springfield have been awarded as follows: steel, BERLIN CONSTRUCTION CO.; cut stone work, DAVID McCORMICK & SON, of Holyoke; lumber, HAMPTEN LUMBER CO. Fred T. Ley & Co. are the general contractors, and Edward H. McClintock is the Engr.

Springfield, Mass.—A site has been selected on Main St. by the State Armory Commission for the erection of an armory. The probable cost is $55,000.

Westerly, R. I.—William R. Walker & Son, 17 Custom House St., Providence, R. I., have completed plans for the court house and town hall to be erected on Broad St. opposite the public library. The building will cost $150,000. $100,000 has been appropriated by the town and $50,000 by the state.

✚Providence, R. I.—The contract for the storage building for the Brown & Sharpe Mfg. Co. on Leland St., was awarded to the E. K. WATSON CO., Warren, R. I. The structure will be of brick, steel and concrete, 169 × 50 ft.

Hartford, Conn.—Bids will be received by the State Tuberculosis Commission, State Capitol, until noon, Oct. 28, for the construction of a nurses home in Meriden; a cottage in Shelton, two stables in Meriden and Hartford. Plans and specifications may be seen at the office of Smith & Bassette, Archs., 36 Pearl St., Hartford.

✚It is reported that the Travelers Insurance Co. has awarded a contract to MAX EIDLITZ & SONS, of New York, for the construction of an addition to their present building on Main St. The building will be several stories high and it is said will be constructed of steel and granite.

✚Hartford, Conn.—Contracts for the erection of a brick warehouse, 147 × 65 ft., and four stories high for the A. C. Loveland Co., at 342 North Front St., have been awarded to J. M. WOOLLEY for the mason work, and FREDERICK W. MERCER for the carpenter work. George Zunner, 756 Main St., is the Arch.

Middletown, Conn.—W. P. Crabtree, Arch., 272 Main St., New Britain, Conn., is preparing plans for remodeling the building of the Middletown National Bank. An entire new marble front will be built, the first floor will be lowered to the sidewalk level, a new storage and safe deposit vaults will be installed, an addition will be erected in the rear for clients and directors rooms, new tile flooring and marble wainscot will be required throughout the building, and a new heating and ventilating system will be installed.

Norwich, Conn.—Cudworth & Woodworth, Archs., 148 Main St., are preparing plans for three buildings to be built at the Norwich Hospital for the Insane. All will be of brick, with concrete floor and fireproof construction.

✚New Haven, Conn.—Sub-contracts have been awarded as follows by the SPERRY ENGINEERING CO., general contractors for the building of S. S. Kresage & Co., on Chapel St.: steel work, BERLIN CONSTRUCTION CO., Berlin, Conn.; plumbing, S. E. DIBBLE, New Haven, and store fixtures, THE M. J. GIBBUD CO., New Haven. The building is 40 × 140 ft. of brick and three stories high. Philip Sellers, 756 Chapel St., New Haven, is the Arch. Noted Aug. 10 and Sept. 14.

Syracuse, N. Y.—The Congregation Adath Yeshurun has decided to erect a new synagogue to cost about $60,000. The building will probably be in neighborhood of Syracuse University.

Plans are being prepared by Merritt C. Conway, 322 Bastable St., for the construction of a 7-story fireproof, concrete and brick, business building. The estimated cost is $80,000. John Moore, North State St., is the owner.

Syracuse, N. Y.—Gordon A. Wright has completed plans for a 4-story and basement store and factory building, mill construction, to be erected on North State St. near Hickory St., by the S. Shapiro Manufacturing Co., 474 South Salina St. Estimated cost, $50,000.

✚Syracuse, N. Y.—DAWSON BROS and CHARLES J. SMITH, 327 Union Bldg., have been awarded contracts for the masonry and carpenter work for the commercial building, 88 × 120 ft., four stories and basement, to be erected by the Duquid Realty Co. on South Warren St. from plans of Taylor & Bonta, Archs. Cost, $125,000.

New York, N. Y.—Plans are being prepared by Sommerfeld & Steckler, 31 Union Sq. for the construction of a 6-story apartment house, at 123d St. from Manhattan St. to Nicholas Ave. The Hancock Construction Co. is the owner.

Plans have been completed by Schwartz & Gross, 347 Fifth Ave. for the construction of a 10-story apartment house at Amsterdam Ave. and 199th St. The Carnegie Construction Co., 420 West 119th St. is owner. The cost is $450,000.

Plans are being prepared by George Fred Pelham, 505 Fifth Ave., for the erection of an apartment house at 141st St. east of Seventh Ave. The Kramer Construction Co., 35 Nassau St., is owner. The cost will be about $200,000.

✚Philadelphia, Pa.—HENRY E. BATON has a contract to erect two wings to cost $82,000 to the Stephen Girard school at 18th St. and Snyder Ave.

Pittsburgh, Pa.—S. B. Charters, whose store building on Third Ave. and Grant St. was destroyed by fire and explosion recently, has had plans prepared by C. E. Willoughby for a new 5-story building on the site. The building will be of fireproof construction and contain elevators.

Frederick, Md.—The Ideal Garage Co. will absorb the Frederick City Garage and will erect another garage at 112 and 114 East Patrick St. The building will be 55 × 234 ft., with a capacity for 75 cars.

Baltimore, Md.—St. Martins Catholic Church, Fulton Ave. and Fayette St. awarded the contract to MONMONIER & SORRELL, 1711 McCulloh St., Baltimore, to erect an addition to the Sacristy of Edifice, the construction will be of stone, 19 × 70 ft. Plans by Owens & Sisco, Arch., 1605 Continental Bldg., Baltimore.

Hirshberg, Hollander & Co., 25 to 27 and 106 to 110 West Pratt St., Baltimore, are having plans by Frank & Kavanaugh, 328 North Charles St. for a 3-story warehouse.

A school will be erected on South Ann St. by Board of School Commissioners. Plans are being prepared by F. E. & H. R. Davis, Arch., 220 St. Paul St. The structure will be of brick construction, and will cost $80,000.

The Mar-del Mobile Co., Geo. Miller, proprietor, Mt. Royal Ave. and Charles St., will probably have plans prepared by Clyde N. Friz, Glenn Bldg., St. Paul St., for an addition to the garage.

✚Fredericksburg, Va.—The State Normal School has awarded the contract to J. C. CURTIS, Denbeigh, Va., for the erection of school building and dormitory. The cost will be $200,000. Plans by C. M. Robinson, Richmond, Va.

✚Norfolk, Va.—The Borough Club has awarded a contract to GREGORY & WILLIAMSON, Norfolk, Va., for erection of club-house, plans by Ferguson-Calrow & Taylor, Archs., Norfolk. The cost will be about $45,000.

Radford, Va.—The Board of Trustees of State Normal and Industrial School for White Women, G. E. Cassell, Secy., Richmond, Va., will receive plans and specifications until Nov. 14 for buildings. Location and relative situation of administration building and dormitories to be indicated in plans, blue prints of site from Capt. W. T. Baldwin, Pres. of Bd. The cost will probably be $150,000 to $200,000.

Lexington, Va.—Bids were received as follows on Oct. 24, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Lexington, Va.: (a) limestone, (b) sandstone: Newport Contracting & Enginering Co., Newport News, Va., (a) $53,132, (b) $56,000; M. B. Stoddard, Staunton, Va., (a) $49,556, (b) $48,950; Holladay & Crouse, Greens Cor., N. C., (a) $54,599, (b) $56,599; Conners Bros. Co., Lowell, Mass., (a) $58,400; Thomas W. Cissell, Connellsville, Pa., (a) $58,000, (b) $61,000; Merrick Fire Proofing Co., New York, (a) $56,770, (b) $57,800; Joseph Seay & Co., Goshen, Va., (a) $46,900, (b) $47,900; King Lumber Co., Charlottesville, Va., (a) $54,770, (b) $58,000; Barnes Bros. Co., Logansport, Ind., (a) $46,300, (b) $48,800; George Leigh & Bro., Louisa, Va., (a) $43,852, (b) $44,907.

Point Pleasant, W. Va.—Bids were received as follows on Oct. 16 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Point Pleasant, W. Va., (a) limestone, (b) sandstone: Conners Bros. Co., Lowell, Mass., (a) $66,100; Barnes Bros., Logansport, Ind., (a) $61,000, (b) $65,000; King Lumber Co., Charlottesville, Va., (a) $73,800, (b) $77,000; Thames & Weber, Beaumont, Tex., (a) $78,030, (b) $78,732; James de Vault, Canton, Ohio, (a) $63,000, (b) $64,060; Harman Bros., Williamsport, Pa., (a) $57,800, (b) $58,700; John G. Unkefer & Co., Minerva, Ohio, (a) $60,322, (b) $61,422.

✚Tampa, Fla.—The contract has been awarded to the FALLS CITY CONSTRUCTION CO., Louisville, Ky., for the construction of a 10-story, marble and reinforced concrete building. The Commercial Building Co., Tampa, is the owner. The cost will be about $250,000.

✚Winchester, Ky.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded contract for the construction of a U. S. post-office at Winchester, Ky., at $82,144 to JOHN G. UNKEFER CO., Minerva, Ohio.

✚**Cincinnati, Ohio.**—The contract has been awarded to D. W. KNIGHT at $48,000 for the Guilford School.

Columbus, Ohio.—Plans have been prepared by Reibel & Son for an administration building for the Board of Education to be erected at Town and Pearl Sts.

Columbus, Ohio.—Bids are being received by the Ohio Board of Administration for alterations and additions to the Columbus State Hospital after plans and specifications of Marriott, Allen & Hall, Archs., Columbus.

✚**Kent, Ohio.**—The Board of Control of the Kent State Normal School has awarded the contract for the construction of an administration building and woman's dormitory, to R. H. EVANS & CO., Columbus, Ohio, at $121,167.

Cambridge, Ohio.—The Board of County Commissioners of Guernsey County is planning to erect a $75,000 infirmary building.

✚**Zanesville, Ohio.**—Board of Trustees of Muskingum College awarded a contract on Oct. 14 for the building of an auditorium to W. C. HANDSHY & SONS, Zanesville, at $35,059. Other bidders were: R. H. Evans & Co., Columbus, $35,171; John Hina, Columbus, $35,576; Craig, Columbus, $37,019; Kraemer, Dayton, $46,459.

Brazil, Ind.—The Indiana Rolling Mill Co. has ordered plans on which to ask for bids for the erection of a building on the site of the building recently destroyed by fire. The building will be steel frame and fireproof. C. W. Moueh is Pres.

Brazil, Ind.—A committee of business men have been appointed by the Circuit Judge to act with the County Commissioners in selecting plans and awarding a contract for the construction of a court-house. The appropriation is $200,000.

Clinton, Ind.—Miller & Pike have ordered plans on which they will ask for bids for the construction and completion of a modern business and office building on Third and Blackman Sts.

Indianapolis, Ind.—P. H. Fitzgerald, A. M. Sweeney, J. F. Johnson and others, Indianapolis, Ind., have organized a company capitalized at $1,200,000 to build and operate lumber mills, railroad switches and plants to manufacture 150,000 acres of hard wood and pine forest in Northern Mississippi.

Terre Haute, Ind.—The Terre Haute Masonic Temple Association has incorporated to construct a lodge home. Paul Kuehler, Chn. Bd. of Dir. Bids will be received as soon as plans are completed and approved.

South Bend, Ind.—The Trustees of the South Bend Lodge of Eagles will soon ask for bids for the erection of a new home. F. E. Herring is Chn.

Linton, Ind.—The Linton Garage Co., recently incorporated, is preparing to receive bids for the construction of a 2-story, fireproof building. Dr. A. T. Custer is Pres.

Battle Creek, Mich.—A 6-story and basement hotel building is contemplated by C. W. Post of the Postum Cereal Co., Battle Creek. The cost will be about $250,000.

✚**Detroit, Mich.**—B. C. Metzel & Co., 404 Hammond Bldg., Detroit, have awarded the following contracts for the 1-story Carnegie library for the Public Library Commission. Ralph Phelps, Secy., 17 Butler Bldg., Detroit: tile roofing to R. HUTTON & CO., 116 Fort St. East; plumbing, to OTTO WURM, 50 Adams Ave. West; painting, to WILLIAM DIEDRICK, 680 Gratist Ave.; electric work, to the SHERRATT ELECTRIC CO., 64 Washington Ave. Cost, $40,000.

Ludington, Mich.—Cowles & Mutcheller, Chase Bldg., Saginaw, Mich., are preparing plans for 2-story and basement school building, 100 × 80 ft., for St. Simon Church. Rev. D. E. Malone, Pastor, Ludington, Mich.

✚**Pontiac, Mich.**—Fisher Bros., Beaudette Bldg., Pontiac, have awarded the general contract for the 3-story and basement business building, for J. M. Donaldson, 14 Auburn Ave., Pontiac, to J. A. O'RILEY, 139 Perkins St.; masonry to F. W. STEVENS, 138 North Saginaw St.

Saginaw, Mich.—Plans have been completed by Cowles Mutchelleo, Chase Bldg., for the construction of a 4-story and basement cold storage warehouse. The Cornwell Beef Co., 611 Thompson St. is the owner.

✚**Detroit, Mich.** — Spier Rohns & Gehrke, 1325 Chamber of Commerce Bldg., Detroit, have awarded the following contracts for the 10-story and basement office building, 40 × 90 ft., for George H. Hauselman, 426 East Main St., Kalamazoo, to H. L. VANDERHORST, 601 South Burdick St. The estimated cost is $150,000.

✚**Saginaw, Mich.**—The MACARTHUR CONCRETE PILE & FOUNDATION CO. has recently been awarded contract for the Pedestal concrete pile foundations for the inbound and outbound freight houses of the Pere Marquette R. R. at Saginaw, Mich.

Chicago, Ill.—F. E. Davidson, Monadnock Bldg., is preparing plans for the construction of 6-story storage warehouse at 1203 East 76th St.

Milwaukee, Wis.—The erection of a hotel building adjoining the Davidson Hotel and Theater Bldg. is being contemplated by Nat Stone, Pres. of the Boston Store. Property recently leased for two 99-year terms.

Milwaukee, Wis.—Bids are being received by Martin Plehn, County Clk. of Milwaukee County, for constructing the dormitory and superintendent's residence, forming part of the Milwaukee County School of Agriculture and Domestic Economy, to be erected in the town of Wauwatosa.

Madison, Wis.—Bids are being received by M. E. McCaffrey, Secy. of the University of Wisconsin, for excavating and constructing foundations for (a) Agricultural Chemistry building and (b) Home Economics and the University Extension building. Arthur Peabody is Superv. Arch.

Sheboygan, Wis.—Plans for the store building of the H. C. Prange Co. are being prepared by Architect Weeks. To be four stories and basement and 90 × 150 ft. in size.

✚**Davenport, Iowa.**—The contract has been awarded to A. A. ARNOULD, Davenport, for the erection of a 3-story brick and stone building at Sixth and Main Sts. The Iowa Telephone Co. is owner. The cost will be about $75,000 and Temple & Burrows, McManus Bldg., are the Archs.

✚**St. Joseph, Minn.**—The contract for the construction convent and chapel for the Benedictine Sisters here, has been awarded to BUTLER BROTHERS, 1000 New York Life Building. Plans were drawn by George B. Staudaher, Rock Island, Ill. The cost is estimated at $150,000.

St. Paul, Minn.—The State Board of Control, P. M. Ringdal, Chn., will receive bids until 2 p. m., Oct. 23 for the construction of a 3-story reinforced concrete boy's dormitory to be built at the State Experiment Station at Morris, Minn. C. H. Johnston, 715 Capital Bank Bldg., St. Paul, is Arch. The cost will be $55,000.

St. Paul, Minn.—Plans are being sketched out and bids will be taken early next spring by E. L. Masqueray, Arch., 408 Oppenheim Bldg., for the construction of a men's dormitory at St. Paul's Seminary of which John Ireland, Archbishop of St. Paul's, is at the head. It will be 4-story of brick and cut stone, reinforced-concrete construction. Cost, $60,000.

✚**Bryan, Tex.**—The contract for the construction of a hotel here has been awarded by J. T. Maloney to GORDON, JONES & CO., of San Antonio.

Gatesville, Tex.—Bids will be received by the Superintendent of the State Institute for the Training of Juveniles until Nov. 3 for the erection of a dormitory building. Plans have been prepared by C. H. Page & Bro., Austin, Tex.

Troy, Okla.—The United States Smelting & Refining Co., Troy, N. Y., has been incorporated here, capitalized at $300 000. The incorporators are W. R. Smith, Ravia; J. T. Knighten, Troy, and T. A. Burnett, Madill.

Pueblo, Colo.—It is reported that the Knight and Ladies of Security are considering erecting a home. The cost will be about $100,000.

Tucson, Ariz.—Plans are under way for the erection of a home for the Tucson Lodge of the Loyal Order of Moose. The site has not yet been selected.

Portland, Ore.—A public auditorium, costing $450,000, is to be erected, and architects are invited to compete for plans. Ellis F. Lawrence, Chamber of Commerce Bldg., is Adviser to the Public Auditorium Com.

✚**Oakland, Cal.**—The contract has been awarded to the CONTINENTAL FIREPROOFING CO., of San Francisco, for the construction of a concrete theatre and office building for Love Realty Co., of Oakland. The contract was awarded at $38,350.

Bakersfield, Cal.—Bids will be received by the Board of County Supervisors, until 11 a. m., Nov. 6 for furnishing materials and making alterations to the Kern County Hospital. O. L. Clark, 422 Brower Bldg., is Arch.

Oakmont, Cal.—The School Board of Oakmont is planning the erection of a school building at E and Fifth St. to cost about $110,000.

Los Angeles, Cal.—Frank M. Tyler, Arch., 600 Union Trust Bldg., has completed plans for a 4-story and basement brick apartment house, 60 × 120 ft., to be erected on Fremont Ave., near Sixth St., for Dr. A. M. Pelton. It will have 102 rooms, divided into 2 and 3-room apartments.

✚**San Diego, Cal.**—The contract has been awarded to R. P. SHIELDS & SON for a 5-story reinforced concrete Y. M. C. A. building at San Diego. Estimated cost, $100,000, exclusive of equipment.

San Bernardino, Cal.—Competitive plans will be received until Dec. 1, for the new building to be erected at Fifth and F Sts., for Y. M. C. A. Cost, $60,000.

✚**San Francisco, Cal.**—The contract has been awarded to WILLIAMS BROS. & HENDERSON, Monadnock Bldg., San Francisco, at $118,766, for the erection of the administration building, four bungalows, laundry, hospital, powerhouse, stables and cow barn at Saratoga Home for Odd Fellows, by the Grand Lodge of Odd Fellows. Ralph W. Hart, Humboldt Bank Bldg., San Francisco, is the Arch.

Ross & Bergren, 222 Keatny St., have had plans prepared for a 7-story, Class B. apartment hotel building, which is to be erected on Mason St. It will cost $110,000.

Ross & Bergren, Archs, are preparing plans for a 5-story and basement brick apartment house, which will be erected at once on Taylor St., near the downtown district. This building will cost about $60,000.

Montreal, Que.—See item under Miscellaneous Contracts—Tunnels, Montreal, Que.

✚**Windsor, Ont.**—CRANE & PENNINGTON, Archs., Windsor, have been awarded the contract for plans for the Masonic temple which is to be erected at London and Oullette Sts. Cost, $80,000.

WATER SUPPLY—IRRIGATION.

(✚*Denotes a contract awarded.*)

Amherst, N. H.—We are officially advised that Dudley & Sawyer, Consult. Engrs., 936 Elm St., Manchester, N. H., have been retained by the city to make surveys, plans and estimates for the installation of a gravity water system. L. F. Wyman is a member of the Town Commission on Water Supply.

Pembroke, N. H.—We are officially advised that the town has engaged Dudley & Sawyer, Consult. Engrs., 936 Elm St., Manchester, N. H., to make an examination, report and estimate for the installation of a municipal water system. Rufus B. Robinson is Chn. Town Com.

Brookline, Mass.—The Water Board on Oct. 23 awarded contracts for supplies as follows: Gates and valves, to the KENNEDY VALVE MFG. CO., of Elmira, N. Y.; brass goods, GLAUBER BRASS MFG. CO.; iron pipe, G. F. UHLER. The Board also authorized Timothy Burke, Chn., to purchase 155 8-in. water meters.

Boston, Mass.—Bids for relaying 6,750 ft. of 8, 10 and 12-in. water pipe in various streets in the city will be received by the Public Works Department until Oct. 27. Louis K. Rourke is Comr.

Bids will be asked by the Public Works Department for laying 3.300 ft. of 8, 10 and 12-in. pipe in various streets in the city. Louis K. Rourke is Comr.

✚The contract for laying 36-in. pipe in Washington and Sanford Sts., Dorchester District, has been awarded by the Public Works Department to M. DE SISTO & CO. at $5,362. Other bidders were: Charles M. Callahan, $5,475; Murphy & Dolan, $5,955; W. B. Bryne, $6.269; George J. Regan, $6,485; D. E. Lynch, $7,330; M. Russo, $7,895.

✚**Baltimore, Md.**—The Board of Award has awarded the contract to the CROOK, KRIES CO., Park Ave. and Saratoga St., Baltimore, for constructing the interior piping system for the pipe line pumping station, at $35,875.

***Cumberland, Md.**—Bids will be received until Nov. 15 by the Evitts Creek Water Co. and the Mayor and City Council for the new water supply for the city. The work will include eight miles of 36-in. wood stave pipe, a concrete dam in Bedford County, Pa., a filter plant, a distribution reservoir, and 24 and 30-in. connecting mains in the city. The entire work will be let in one contract. James Fuertes is Consult. Engr., 140 Nassau St., New York. Advertised last week. Noted on Feb. 9, March 16, May 25, June 1 and Oct. 5 and 19.

Washington, D. C.—Bids will be received until 2 p. m., Nov. 9, by the District Commissioners for furnishing and delivering f. o. b., Washington, one gasoline, self-propelled pumping engine for use in the Fire Department.

Washington, D. C.—The District Commissioners have ordered new water-mains laid in the following Sts.: Brentwood Road, 465 ft. of 8-in.; Milwaukee Pl., 150 ft of 4-in.; 13th St., 420 ft. of 8-in.; 14th St., S. E., 545 ft. of 8-in..; 16th St., 210 ft. of 8-in.; S St., 1,375 ft. of 8-in.

Camden, S. C.—The citizens have voted in favor of issuing bonds for the installation of a water-works system.

Gainesville, Fla.—G. H. Cairns, Consult. Engr., Gainesville, is completing plans for the installation of water-works here. Estimated cost, $40,000. Bonds were voted on Oct. 10. Noted on Oct. 5.

Mobile, Ala.—The City Commissioners have authorized the extension of water mains in Washington Ave., South Water St., and Broad St.

Piedmont, Ala.—The city is considering an issue of $10,000 of bonds for constructing water-works extensions. P. W. Roberts is Mayor.

Amory, Miss.—Bids will be received until 4 p. m., Nov. 7 by the Mayor and Council for the construction of water and sewer systems. The work will consist of erecting an elevated tank of 100,000 gallons capacity; two 500-gallon-per-min. motor-driven pumps; one air-lift system; about five miles of mains, 4 to 10 ins. in diameter; deep wells; 58 fire hydrants, valves and valve boxes; about seven miles of sewers, 8, 10, 15 and 18-in. in diameter; 58 manholes; eleven flush tanks. Bids will be received, for furnishing material and constructing water-works and sewer systems, complete, and for furnishing labor and constructing systems, town to furnish the material for the whole work or any subdivision. Plans and specifications may be seen at the office of the Mayor, and at the offices of Solomon-Norcross Co., Engr., Candler Bldg., Atlanta, Ga. Noted on Oct. 19.

Vicksburg, Miss.—The City Council has accepted the report of the Water-Works Committee recommending plans by A. L. Dabney, Engr., for the following work: 27 miles of mains from 4 to 16 ins. in diameter, of which a portion are 4-in. 6-in. and a portion larger piping; 245 fire hydrants; three 250-HP. water-tube boilers, with mechanical stokers and concrete stacks; three high-service pumps, with total capacity of 10,000,000 gallons per 24 hours; three low-service pumps, with total capacity of 9,000,000 gallons; two settling basins, with 1,500,000 gallons combined capacity; filters of 2,000,000 gallons daily capacity, with additional tanks for increased capacity as required; and a clear-water basin in two compartments, with a total capacity of 750,000 gallons. Estimated cost, $340,000.

Haynesville, La.—The city is considering the construction of a water-works system. Estimated cost, $10,000.

***Obion, Tenn.**—Bids will be received until 2 p. m., Nov. 21, by the Board of Mayor and Aldermen for the construction of water-works. S. [illegible] Harris is Recdr. C. H. Jenks is Engr., Union City, Tenn.

✚**McKenzie, Tenn.**—The town has awarded the contract to S. T. VELTMAN, of Paris, Tenn., for laying about five miles of water mains.

Cambridge, Ohio.—The city is considering an issue of bonds for $15,000 for improving the water-works system.

Indianapolis, Ind.—The Indianapolis Water Co. has obtained a franchise to supply Broad Ripple, a suburban town of 1,000 inhabitants, with water. The company contemplates constructing and equipping a separate pumping station.

Sullivan, Ind.—The City Council has granted a 25-year franchise to E. M. Kerlin, Vincennes, Ind., for the construction and operation of a modern water plant.

Kalamazoo, Mich.—The city is considering the question of issuing bonds for $50,000 for the erection of two new standpipes to supply the east and south sides of the city with water.

Ubly, Mich.—We are officially advised that the city will install a water-works system, including a steel tower and tank. Estimated cost, $5,000. The Michigan Pipe Co. is Engr., Bay City, Mich.

***Bement, Ill.**—Bids will be received until Nov. 2 by the village for 4,511.5 ft. of 6-in., 5,578 ft. of 5-in. pipe, ten fire hydrants, three 6-in valves and boxes complete, one 4-in. valve and box complete, and the necessary lead and jute, digging, etc. Estimated cost, $7,616. J. R. Bower is Engr., Bement. Noted on Sept. 21.

Rock Island, Ill.—Bids will be received until 2 p. m., Nov. 17, by Lt.-Col. George W. Burr, Ordnance Dept., U. S. A., Rock Island, for the construction of a filtration plant at Rock Island Arsenal, Rock Island. Specifications are on file at the office of Engineering News, New York.

Rushville, Ill.—The city is considering issuing $30,000 of bonds for the extension of the water-works system.

Seaton, Ill.—The citizens have voted to install a system of water-works.

Menasha, Wis.—The city is considering issuing bonds for $40,000, for the extension of the water-works and electric light systems.

***Sheyboygan, Wis.**—The Board of Water Commissioners received bids as follows on Oct. 16 for furnishing, delivering and erecting on foundations furnished by the city one 8,000,000-gallon pumping engine in an addition to the present pumping station: Fred M. Prescott Steam Pump Co., Milwaukee, Wis., $12,500 and $17,800; Norberg Mfg. Co., Milwaukee, $22.500, $26,975 and $34,190; Coburn Co., New York, $23,120 and $25,500; B. M. Cobun Co., Chicago, $20,500, $21,130, $14,825 and $17,550; Allis Chalmers Co., Milwaukee, $19,740.

New London, Iowa.—We are officially advised that plans, specifications and estimates for the installation of a system of water-works and sanitary sewers have been prepared by Hall & Adams, Consult. Engrs., Centerville, Iowa. Noted on Oct. 12.

Duluth, Minn.—Bids will be received until 10 a. m., Oct. 28, by the Board of Water and Light Commissioners for laying water and gas mains. L. N. Case is Mgr.

✚**Cass Lake, Minn.**—The Cass Water, Light & Power Co. has awarded a contract to HUGH FAWCETT, of Duluth, Minn., for the construction of a concrete pump-house.

McIntosh, Minn.—Bids will be received until 7 p. m., Nov. 7, by George A. Beito, Village Recdr., for the construction of water mains.

Winona, Minn.—The Winona Ry. & Light Co. has decided, it is stated, to spend about $20,000 for improvements to include a gravity water system in the levee front.

Pittsburg, Kan.—The city has purchased the water-works plant here for $225,000.

Tecumseh, Neb.—The State Auditor has approved the issue by the city of $15.000 of bonds for water service extensions.

✚**Shelby, Neb.**—The town has awarded the contract to the DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa, for constructing the proposed water system here, at $12,86[illegible].

Onida, S. Dak.—The City Council is considering the extension of the water mains to the Cole Addition section of the city.

Devils Lake, N. Dak.—We are officially advised that the city is considering the installation of a municipal water plant. Estimated cost, $33,000.

+Little Rock, Ark.—The Little Rock Ry. & Electric Co. has awarded a contract to MEERS & DAYTON for the erection of a pumping tower. Estimated cost, $5,000.

+Fort Sam Houston, Tex.—The contract has been awarded to WM. G. SCHUWIRTH, of San Antonio, Tex., by Capt. P. W. Guiney, Q. M., U. S. A., Fort Sam Houston, for the extension to the water distributing system, at $6,449. The work includes installing about 3,710 lin. ft. of 10-in. water main from pumping plant to tanks. Bids were opened Sept. 26. List of bidders noted on Oct. 12.

Saint Jo, Tex.—The city has voted to issue bonds for the installation of a water-works system.

+Rogers, Tex.—The City Council has awarded the contract to HAMILTON BROS., of Taylor, Tex., for laying a 6-in. pipe line from the Leon River to the reservoir, a distance of four miles.

Waco, Tex.—The city has decided to spend $250,000 for water-works improvements from plans of N. Wrenskiold, Consult. Engr., of Dallas, Tex. Noted on Oct. 5.

Hollis, Okla.—The Western Engineering Co., of Oklahoma City, Okla., has prepared plans for the installation of a water-works and sewer system. Estimated cost, about $72,000. Noted on Sept. 28.

+*Muskogee, Okla.—A Correction.—We are officially advised that six bids were received on Oct. 5 by the city for the construction of the 54-in. intake to be laid across the Arkansas River and up the head of the Grand River, and for the concrete inlet tower. The contract has been awarded to F. P. McCORMICK, Chicago, Ill., at $89,200. Incorrectly noted last week as no bids received on the work. Alexander Potter, 114 Liberty St., New York, is Consult. Engr.

Muldrow, Okla.—Plans have been prepared by the Western Engineering Co., of Oklahoma City, Okla., for the construction of the water-works and electric-light plant here. Estimated cost, $33,000. Noted on Sept. 28.

Ochelata, Okla.—Plans for the construction of water-works here have been prepared by the Western Engineering Co., of Oklahoma City, Okla. Estimated cost, $15,000. Noted on Sept. 28.

Lawton, Okla.—The city and the Gulf, Colorado & Santa Fe Ry. Co., F. Merritt, Ch. Engr., are considering the construction of a 1,000,000,000-gallon reservoir. Estimated cost, $200,000.

Olustee, Okla.—The city has voted to issue $20,000 of bonds for the construction of a water-works system.

Pawhuska, Okla.—The Attorney-General of the State has approved the bond issue for $60,000 by the city for water-works extensions.

Pryor Creek, Okla.—The city has voted and sold bonds for $70,000 for water-works extensions. Plans and specifications are being prepared and work will be done under the supervision of the Benham Engineering Co., American National Bank Bldg., Oklahoma City, Okla. Bids for materials will be asked about Nov. 15.

+Las Animas, Colo.—The Directors of the Bent County Reservoir Co. have awarded the contract to DE REMER & OLESON, Denver, Colo., it is reported, for the complete construction of dam and canals in the company's Rule Creek project, at about $500,000.

Yuma, Ariz.—We are officially advised that bids were received as follows on Oct. 12 by the U. S. Reclamation Service, Yuma, for the construction of about nine miles of canal in the Yuma Indian Reservation, in California, Yuma Project, Arizona-California: (a) Schedule 1, (b) Schedule 2, (c) Schedule 3, (d) Schedule 4, (e) Schedule 5, (f) Schedule 6: Occidental Construction Co., Los Angeles, Cal., (a) $66,734, (b) $65,520, (c) $76,730, (d) $73,730, (e) $73,734, (f) $56,580; J. H. Maxey, Yuma, (a) $52,440, (b) $53,744, (c) $48,020, (f) $42,790; F. H. Harris, El Paso, Tex., (c) $62,570; Gillette & Montgomery, Los Angeles, (a) $46,754, (b) $42,507; Hudson, Johnson Construction Co., (d) $57,200, (e) $46,674; P. Walker, Los Angeles, (c) $47,660, (f) $35,070; George R. Irvine, Newhall, Cal., (f) $46,010; Standard American Dredging Co., San Francisco, Cal., (c) $56,255, (d) $44,065, (e) $46,994; J. C. Norton, Phoenix, Ariz., (a) $48,554, (b) $46,745, (c) $54,830, (d) $53,200, (e) $54,374, (f) $50,495; Shattuck, Eddinger Co., Los Angeles, Cal., (a) $51,164, (b) $45,770, (c) $57,600, (d) $59,440, (e) $61,784, (f) $47,680; H. M. Snyder & Co., Yuma, (d) $58,470; David Mulligan, Yuma, (b) $43,095; B. C. Heyl, Yuma, (c) $57,210; Maney Bros. Co., Oklahoma City, Okla., (a) $58,034, (b) $49,782, (c) $59,970, (d) $59,455, (e) $59,459, (f) $44,387.

+Boise, Idaho.—A contract has been awarded to MANEY BROS. & CO. for the construction of a dam for the Crane Creek Irrigation Land & Power Co., by which 20,000 acres or more of agricultural land will be cultivated.

+Seattle, Wash.—Cummings & Kiehl, general contractors for the Cedar River pipe-line, have awarded to the ROUNDS-HURSEN CO., Globe Block, Seattle, sub-contracts for two gate-houses at the Green Lake reservoirs at about $20,000.

Ellensburg, Wash.—F. C. Kelsey, Consult. Engr., Selling Bldg., Portland, Ore., has been retained to make surveys and estimate the cost of the construction of a high-line canal in the Kittitas Reclamation District.

Portland, Ore.—The Water Board has ordered the construction of a large feeder watermain from Division St. to the center of the Sellwood District. Estimated cost, $129,000. D. D. Clarke is Engr., Bd.

+Klamath Falls, Ore.—The Klamath Falls Light & Power Co. has awarded a contract to G. A. HARMON & CO., of Riddle, Ore., for drilling an artesian well.

Los Angeles, Cal.—Bids will be received about Nov 17 by the Board of Public Works for steel syphons for the Los Angeles Aqueduct.

San Francisco, Cal.—The Bureau of Engineering is preparing plans for the following work on the auxiliary water supply system: Contract 33, construction of Jones and Clay St. distributing reservoir; Contract 34, pumping station No. 2, Van Ness Ave. and the Bay of San Francisco; Section A, general contract for grading the foundation, for furnishing and installing plumbing and for the construction of the building; Section B, furnishing and erecting structural steel and iron work, and Section C, furnishing and installing mechanical equipment. Marsden Manson is City Engr.

+El Centro, Cal.—The contract has been awarded to the WALKER BROS. CONSTRUCTION CO. for constructing three miles of main canal on the California side of the Colorado River, which is to connect the mesa lands with the siphon under the river. About 450,000 cu. yds. of earth excavation will be required.

+Long Beach, Cal.—The city has awarded a contract to the U. S. CAST IRON MFG. C., San Francisco, for furnishing 1,700 tons of c.-i. pipe for the municipal water system, at $21.25 per ton, via rail, or $30.60 per ton via water.

SEWERAGE.

(**Denotes that this work is advertised in Engineering News.*)

Hartford, Conn.—Bids for the construction of a sewer in Chadwick Ave. will be received by the Board of Contract and Supply until 11 a. m., Oct. 30. Plans and specifications are on file at the office of the City Engineer.

Willimantic, Conn.—Bids for the construction of a sewer in South St. will be received by Mayor D. P. Dunn until 8 p. m., Oct. 30. Plans and specifications are on file at the office of the City Clerk.

Ansonia, Conn.—The City Engineer is preparing plans for extending the sewer system in the Fifth Ward. About 14,551 ft. of pipe will be laid.

Morrisville, N. Y.—Bids will be received by John J. Roberts, Pres. Bd. Trustees State School of Agriculture, until Oct. 30, for constructing a sewer and sewage disposal plant at the school. Franklin B. Ware, Albany, is State Arch.

+South Glens Falls, N. Y.—The Village Trustees have awarded the contract for building a sewer system and disposal plant to the SHERMAN CONSTRUCTION CO., Glens Falls, at $33,745.

+Dunkirk, N. Y.—The Common Council has awarded to JOHN H. CROWE, at $11,916, the contract for constructing a sewer in Central Ave.

Beverly, N. J.—The Town is considering the construction of a sewer system estimated to cost from $35,000 to $40,000.

+Newark, N. J.—The contract for the construction of the Ferry St., Christie St. and Bonykamper Ave., sewer was awarded Oct. 19 to JAMES A. CHRISTIE, at $6,597. Noted Oct. 19.

Summit, N. J.—Bids will be received at the joint meeting of the Common Council of the city of Summit and the Township Committee of the Township of Millburn at the office of O. B. Merrill, Clk., City Hall, Summit, until 8.30 p. m., Oct. 31, for the construction of a trunk sewer in the Morris Turnpike. The estimate of the work to be done is as follows: 2,500 lin. ft. 12-in. vitrified pipe sewer laid; 4,100 lin. ft. 10-in. vitrified pipe sewer laid; 500 lin. ft. 8-in. vitrified pipe sewer laid; 100 lin. ft. 4-in vitrified pipe sewer laid; 26 manholes, complete. Henry S. Acken is Chn. of Com.

North Wales, Pa.—The Town Council is considering the construction of a sewer system. Ralph Schafenacker is Clk.

Pittsburgh, Pa.—Bids will be received by Jos. G. Armstrong, Dir. Pub. Wks., until Oct. 27, for constructing sewers in Valier Way, Hazlewood Ave., Greenwood, Canfield and Seitz Sts.

***Baltimore, Md.**—The lowest bid received Oct. 18 for furnishing and installing sewage screens for the sewage disposal works was submitted by the O'Oliver Engineering Co., Philadelphia.

***Richmond, Va.**—Bids willl be received by Charles E. Bolling, City Engr., until 3 p. m., Oct. 30, for constructing one sewer 5,000 lin. ft., from 5½ to 10 ft. diameter, and one sewer 3,260 lin. ft., from 2½ to 4 ft. diameter. Information, plans and profiles can be obtained at the office of the City Engineer.

+Summerville, Ga.—The contract for constructing a sewer system has been awarded to GUILD & CO., Chattanooga, Tenn., at $11,000. Noted Sept. 21.

Amory, Miss.—See item under Water Supply—Irrigation.

Nashville, Tenn.—Bids have been asked by the Board of Public Works for the construction of a sewer in South First St., from the sewer at the alley north of Fatherland St. to Russell St.

Laporte, Ind.—Preliminary plans have been prepared by the City Engineer for a trunk sewer, with laterals, to extend northwest along Monroe St. to Rose St., on Rose to Detroit and on Detroit to the lake front. Estimated cost, $40,000. Work on the improvement will not start before spring.

+Fairfield, Iowa.—We are officialy advised that bids for sewer construction, according to plans prepared by Hall & Adams, Engrs., Centerville, Iowa, were received Oct. 14 as follows: Section 1, two disposal plants; Sections 2, 3, 4 and 5, outlets and lateral sewers: GEORGE B. INMAN, Kansas City, Mo., Section 1, $14,578 (awarded contract for Section 1); J. W. Smith & Son, Oklahoma City, Okla., (1) $18,500, (2) $10,013, (3) $20,380, (4) $14,510, (5) $13,247; total, $76,650; Spaulding & Kearns, Fairfield, (1) $17,862, (2) $11,792; Burlington Construction Co., Burlington, Iowa, (1) $15,000, (2) $10,112, (3) $23,576, (4) $15,063, (5) $15,248; total, $78,999; Hoar & Parkinson, Iowa City, Iowa, (2) $11,056; C. R. McKay, Omaha, Neb., (2) $10,263; Lanyon & Clifford, Waukeegan, Ill., (2) $8,744, (3) $20,995, (4) $14,616, (5) $13,864; McGuire & Stanton Construction Co., Leavenworth, Kan., (1) $15,300, (2) $9,343, (3) $19,856, (4) $14,189, (5) $13,448; total, $72,136; JOHN BROGAN, Green Bay, Wis., (1) $17,800, (2) $8,196, (3) $18,641, (4) $13,163, (5) $12,360; total, $70,160; (awarded contracts on Sections 2, 3, 4 and 5); Lana Construction Co., Harlan, Iowa, (1) $8,350, (2) $9,892, (3) $21,169, (4) $14,848, (5) $13,789; total, $68,058; Lytle Construction Co., Sioux City, Iowa, (1) $15,683, (2) $10,678, (3) $24,204, (4) $15,672; total, $83,396; Engineer's estimate, (1) $12,690, (2) $8,240, (3) $21,140, (4) $14,600, (5) $14,250; total, $70,920. Noted Oct. 5, under Centerville, Iowa.

Mount Pleasant, Iowa.—We are officially advised that estimates have been prepared by Hall & Adams, Centerville, Iowa, for outlet sewers and a disposal plant at Mount Pleasant. Noted Oct. 19.

New London, Iowa.—See item under Water-works.

Rosedale, Kan.—We are officially advised that preliminary plans are being prepared by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for a sewer system covering the whole city. H. C. Botsford is City Engr.

+Fullerton, Neb.—We are officially advised that the contract for constructing a sewer system has been awarded to H. J. Cathroe, Omaha, at $7,840.

Milford, Neb.—Burd F. Miller, State Arch., Brandeis Theatre Bldg., Omaha, is preparing plans for a sewer system at Milford.

+St. Louis, Mo.—The Board of Public Improvements has awarded the contract for building the second section of the Rock Creek joint district sewer to the GEORGE G. PRENDERGAST CONSTRUCTION CO., at $164,834. Noted Oct. 5.

+St. Louis, Mo.—Press reports state that the contract for constructing a sewer two miles long in the East Bottoms has been awarded to T. A. ROBERTSON.

+Kansas City, Mo.—Press reports state that a contract for constructing a sewer in Guinette Ave., was awarded Oct. 13 to T. W. ROBINSON at $15,509.

+*Dallas, Tex.—We are officially advised that bids for laying from 15-in. vitrified pipe to 80-in. concrete pipe storm on Pennsylvania Ave. and other streets were received Oct. 6 as follows: Jos. B. Winslett, Jr., $38,693; C. W. Olcott, $35,910; Dallas Lime & Gravel Co., $35,180; J. W. Smith & Son, Oklahoma City, Okla., $34,912; Tarrant Construction Co., $40,710; D. C. Kelley, $50,648. J. W. SMITH & SON Oklahoma City, Okla., $34,912 (awarded contract). Noted Sept. 21.

Oklahoma City, Okla.—Bids for constructing sanitary lateral sewers have been received as follows, (a) sewer to serve Blocks 24 to 34, inclusive; (b) Blocks 2 to 9; (c) Block 1; Dale additions, Lots 17 to 36: Mayfield-Shoro Construction Co., (a) $3,566, (b) $4,635, (c) $1,948; Stokes Construction Co., (a) $4,188, (b) $3,560, (c) $1,738; Reinhardt-Donovan Co., (a) $5,032, (b) $4,458, (c) $2,274; Deer & Broderick, (a) $4,702, (b) $4,146, (c) $2,016; Hunter & Hunter, (a) $4,108, (b) $5,238, (c) $2,090.

Spokane, Wash.—Bids will be received by the City Council until 11 a. m., Nov. 2, for the construction of a sewer to be known as First Ward Subtrunk Sewer District No. 17, according to the plans and specifications on file in the office of the City Engineer. D. C. Coates is Comr. Pub. Wks.

Toppenish, Wash.—Plans and specifications have been completed for a sewer system estimated to cost $50,000.

Klamath Falls, Ore.—All bids received for constructing the Fourth Sewer Unit, have been rejected, and the work will be readvertised. Estimated cost, $20,000.

Turlock, Cal.—The City Trustees are considering an extension of the sewer system to cost $12,500.

Monrovia, Cal.—The following bids were received by the Board of Trustees of Monrovia for the construction of an extension to the municipal sewer system: Watson & Spicer, Coronado, $13,150; Mlagenovich & Gillespie, $14,836; Lowell & Pucich, $14,882; Giltner & Lee, $16,986, and T. J. Shea, $21,290. The bids were taken under advisement and the contract will be awarded at the regular meeting. Olmstead & Gillelen, Wright & Callender Bldg., are Engrs.

San Bernardino, Cal.—Bids will be received until 7.30 p. m., Oct. 30, for constructing a 6-in. vitrified pipe sewer on Catic St. S. G. Batchelor is Clerk.

St. Lambert, Que.—Bids for installing a sewer on Front St. have been received by the Town Council as follows: Standard Construction Co., $14,000; A. Marchand, $12,929; Contractors, Ltd., $12,450; B. Laurent, $11,000; Craib & Plamoudon, $13,000; C. L. Herby, $14,870; R. E. Gillespie, $13,284.

Montreal, Que.—Bids will be received by the Board of Commissioners until noon, Oct. 31, for the construction of sewers in various streets, according to the sections and specifications on file in the office of the Superintendent of Sewers. L. N. Senecal is Secy.

Sudbury, Ont.—Bids will be received until Nov. 16 by Geo. Elliott, Town Clerk, for the construction of sewers and a pumping station. Bids will be called for main sewers and disposal works in a few months. Plans and specifications may be seen at office of the Resident Engineer, Sudbury, or Chipman & Power, Consult. Engrs., Toronto.

STREETS AND ROADS.

(**Denotes that this work is advertised in Engineering News.*)

+Boston, Mass.—The contract for the construction of a macadam roadway in Morton St., Dorchester District, has been awarded to JOHN KELLY CO., at $10,000. Other bids were: James Doherty, $10,448; F. S. & A. D. Gore Corp., $10,756; Coleman Bros., $11,352; John McCourt & Co., $11,862. Louis K. Rourke is Comr. of Pub. Wks.

Bids will be received until Oct. 30 by the Public Works Department for furnishing and placing filling in Hallet St., Dorchester District. Louis K. Rourke is Comr. of Pub. Wks.

+The contract for laying wood block pavement on Northampton St., Roxbury District, has been awarded to the F. S. & A. D. GORE CORP., at $9,791. Only other bid was the Central Construction Co., at $10,066.

Bids will be received until Oct. 30 by the Public Works Department for a macadam roadway in Creston St., Roxbury District. Louis K. Rourke is Comr. Pub. Wks.

Malden, Mass.—The Street and Water Commission has presented a plan for widening Salem St., from Webster Playstead to Maplewood Square to 60 ft., at a cost of $8,500.

Hartford, Conn.—Contracts for state roads, bids for which were received at the office of State Highway Comr. James H. MacDonald, Oct. 11, have been awarded as follows:

+Town of Plymouth, 10,950 lin. ft. macadam on the Terryville Road, to PIERSON ENGINEERING & CONSTRUCTION CO., Bristol, Conn., at $1.40 lin. ft. for macadam, $2.15 for telford, $1 per lin. ft. for rubble drain, 90 cts. per sq. yd. for cobble gutters.

+Town of Barkhamsted, 9,564 lin. ft. graded-telford road on the Winsted Turnpike, to CAESAR A. ROSSI, Torrington, Conn., at $15,119 for the grading, $1 per lin. ft. for telford, and $1 per lin. ft. for rubble drain.

+Town of Southongton, 6,009.6 lin. ft. graded-telford road on the Waterbury Turnpike, to JOHN F. KNAPP, Belden Hill, Conn., at $13,700 for grading, 60 cts. per lin. ft. for telford, 60 cts. per lin. ft. for rubble drain, 75 cts. per sq. yd. for cobble gutters.

+Town of Somers, 7,860 lin. ft. gravel-telford road on the Stafford Turnpike, to A. D. BRIDGE'S SON, INC., Hazardville, Conn., at $2.77 per lin. ft. for gravel, 80 cts. per lin. ft. for telford, $1 per lin. ft. for rubble drain.

+Town of Wolcott, 14,150 lin. ft. graded road, to JOSEPH D'ALOIA, Cromwell, Conn., at $18,183 for grading, 85 cts. per lin. ft. for telford, 75 cts. per lin. ft. for rubble drain.

City of New Haven, 5,403 lin. ft. macadam-telford, all bids rejected. Work will be readvertised. Noted Oct. 19.

+Buffalo, N. Y.—The Commissioner of Public Works has awarded a contract to the GERMAN ROCK ASPHALT & CEMENT CO. for repaving Austin St., 28 ft. wide, with asphalt, at $5,940, and for repaving Warren Ave., 28 ft. wide, with asphalt, at $6,100.

New Rochelle, N. Y.—The Common Council has appropriated $7,550 for grading Fifth Ave., between State St. and the City Park.

New York, N. Y.—Bids will be received by Cyrus C. Miller, Pres. Boro. the Bronx, until 10:30 a. m., Nov. 2, for regulating, grading and paving various streets.

***Blauvelt, N. Y.**—See "Proposals."

Newark, N. J.—Bids will be received by the Board of Street and Water Commissioners until Oct. 26 for grading, curbing and flagging Grafton Ave., from Summer to Washington Ave. The work includes: 9,770 cu. yds. embankment; 2,090 lin. ft. 20 × 4-in. four-cut curb; four sets of 20 × 4-in. four-cut corners; 320 sq. ft. Belgian bridging; 10,580 sq. ft. 5-ft. flagging.

Bids will be received by the Committee on Roads and Assessments of the Board of Chosen Freeholders, County of Essex, until 3 p. m., Nov. 6, for grading and paving with telford pavement Clinton Ave., for a distance of 5,200 ft., and Lindsley Road, about 8,000 ft. Wallace Ougheltree is Dir.

✚Brunswick, N. J.—The Board of Freeholders has awarded the contract for laying a new road from Highland Park to Bonhamtown to THOMAS H. RIDDLE, Brunswick, at $53,333.

✚Philadelphia, Pa.—Contracts for resurfacing macadam roads have been awarded by H. A. Mackey, Dir. Pub. Wks., as follows: To J. F. SHANLEY CO., Butler St., from Richmond St. to Frankford Ave., Texaco asphaltic concrete, at 81 cts. per sq. yd.; Longshore St., from Torresdale to Keystone St., Pioneer asphalt cement, at 85 cts. per sq. yd.; Overbrook Ave., from 63d to 64th Sts., Texaco asphaltic concrete, at 82 cts. per sq. yd.; 64th St., from Woodbine to Overlook Aves., Pioneer asphalt, at 83 cts. per sq. yd.; Sepviva St., from Butler to Wheatsheaf Lane, Texaco asphaltic concrete, at 83 cts. per sq. yd.; Falls Road, from Monument Road to Windemere Ave., at 83 cts. per sq. yd.; Ford Road, from Belmont to Monument Roads, Pioneer asphalt, at 83 cts. per sq. yd.

R. P. BENNIS, Bensalem Pike, from Busleton Pike to Red Lion Road, amiesite, at 99 cts. per sq. yd.; Busleton Pike, from Devereaux to Cottman Sts., bylerite asphaltic concrete, at 90 cts. per sq. yd.

JOHN V. CUMMINS, Church Lane, from Stenton Ave. to York Road, Texaco asphaltic concrete.

FILBERT PAVING & CONSTRUCTION CO., Limekiln Pike, from Upal St. to County line, Filbertine, at 88 cts. per sq. yd.; Oak Lane, from York Road to City line, Filbertine, at 88 cts. per sq. yd.; 70th Ave., from Lakeside to Cheltenham Aves., Filbertine, at 88 cts. per sq. yd.

DAVID McMAHON, McCallum St., from Allens Lane to Cresheim Bridge, Texaco asphaltic concrete, at 83 cts. per sq. yd.; Morton St., from Haines to Upsal Sts., macadam asphalt binder, at 75 cts. per sq. yd.; Stenton Ave., from Bethlehem Pike to north of Gravers Lane, macadam asphalt binder, at 78 cts. per sq. yd.; School Lane, from Morris St. to Wissahickon Ave., Pioneer asphalt cement, at 73 cts. per sq. yd.; Washington Lane, from Morton St. to Cheltenham Ave., macadam asphalt binder, at 78 cts. per sq. yd.

CUNNINGHAM PAVING & CONSTRUCTION CO., 63d St., from City to Lancaster Ave., Texaco asphaltic concrete, at 79 cts. per sq. yd.

BARBER ASPHALT CO., Haverford Ave., from 68th St. to County line, asphaltic cement, at 94 cts. per sq. yd.

✚Pittsburgh, Pa.—Press reports are to the effect that Joseph G. Armstrong, Dir. Pub. Wks., and William A. Magee, Mayor, have awarded the contract for grading, paving and curbing the flood streets in the West end to the JAMES H. McQUAIDE CO., Bessemer Bldg., Pittsburgh, at $137,015.

Bids will be receiver by Joseph G. Armstrong, Dir. Pub. Wks., until Oct. 27, for grading, curbing and paving various streets.

✚Swissvale, Pa.—We are officially advised that contracts were awarded Oct. 21, by E. M. Watt, Supt. Pub. Wks., as follows: for improving eleven streets, to McCRADY BROS., at $48,000; for improving one street, to D. J. MADIGAN & CO., at $8,000; for improving one street and a concrete wall, to the PROSSER CONTRACTING CO., at $7,550, and $1,660, respectively. Noted Oct. 19.

Valley Forge, Pa.—Bids will be received by J. O. Clarke, Engr., Valley Forge Park Comn., Crozer Bldg., Philadelphia, until noon, Oct. 30, for improving Valley Forge Park by constructing stone paving, bluestone steps with concrete foundations, standard concrete catch basins and outlets, drains, guard fences and hitching rails. A. H. Brown is Secy. of Comn.

Wilkes-Barre, Pa.—Bids will be received by James M. Norris, County Controller, until 2 p. m., Nov. 13, for constructing a public road or highway of bituminous macadam in the County of Luzerne, through the Townships of Fairview, Wright, Dennison and Foster, a distance of 20.3 miles, in accordance with the plans and specifications prepared by Moore & Myers, now on file in the office of the Commissioners of Luzerne County.

Annapolis, Md.—Bids will be received by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Nov. 18, for constructing concrete walks and steps at the United States Naval Hospital, Annapolis. Specifications are on file at the office of Engineering News.

✚Portsmouth, Va.—The Seventh Ward Local Board has awarded a contract to R. P. DENBY, Norfolk, Va., at $9,174, to grade ten streets, and t LOUIS LAWSON, Norfolk, at $30,11 to construct concrete curb, gutters an walks.

Wise, Va.—Bids will be received until Oct. 31, for grading about one mile of road. P. St. J. Wilson, Richmond, is State Highway Comr.

✚Florence, S. C.—Press reports state that the ATLANTIC BITULITHIC CO., Richmond, Va., has been awarded a contract for constructing 40,000 sq. yds. macadam and bitulithic paving on Dargan and Evans Sts., at approximately $50,000.

Jacksonville, Fla.—Bids will be received by the Board of County Commissioners, until Oct. 27, for paving the Mayport Road, from Atlantic Boulevard to the city limits of Mayport, and cleaning, grubbing and grading the Pensacola Road. Gail L. Barnard is County Engr.

Scottsboro, Ala.—Bids will be received by the Board of County Commissioners at Scottsboro, until Nov. 8, for grading, draining and surfacing with macadam about 2.7 miles of State-aid road, and 6.7 miles of county road. W. S. Keller, Montgomery, is State Highway Engr.

✚New Orleans, La.—A contract for constructing 38 miles of highway in East Carroll Parish has been awarded to A. K. AMACKER, at $24,925.

New Iberia, La.—The Iberia Parish Police Jury has authorized the issue of bonds for $35,000, to be used in constructing a road from New Iberia to Jeanerette. Estimated cost of road, $50,000.

Hill City, Tenn.—Bids for paving North Market St. and Frazier Ave. have been received by the Hamilton County Road Bond Commissioners, as follows: West Construction Co., $1.48 per sq. yd. for bituminous concrete, using Bermudez Trinidad asphalt; Southern Paving & Construction Co., $1.43 for bituminous concrete, using California asphalt; Noll Construction Co., $1.32 for bituminous macadam, using Bermudez asphalt. All bids were for a 3-in. wearing surface on a concrete base.

✚Louisville, Ky.—Bids for the reconstruction of Fourth St., from Walnut to Jefferson Sts., with creosoted wood blocks have been received as follows by the Board of Public Works: Henry Bickel, $14,798, or $2.80 per sq. yd.; F. G. Breslin, $21,140; L. W. Hancock Co., $16,960; L. R. Figg & Co., $15,325; G. W. Gosnell, $15,001.

✚Bryan, Ohio.—Bids were received Oct. 18 by the Commissioners of Williams County for the improvement of the Bryan-Defiance Road, as follows: Fishbaugh, Karch & Appenzeller, Greenville, $11,841; J. A. Westrick, Holgate, water bound macadam, $12,050; water bound slag, $12,075; KELLY CONSTRUCTION CO., Bryan, macadam, $12,535; Ohio slag, $13,506; slag with carbo via, $13,506 (contract awarded); stone with carbo via, $13,966.

✚Columbus, Ohio.—The Commissioners of Franklin County have awarded a contract for improving three miles on the Canal Winchester Pike to RADABAUGH & IMBODIN, Logan, at $12,390. One mile of the proposed road is to be finished in water bound macadam with tar surface, and the remainder in macadam without the tar treatment.

Fremont, Ohio.—All bids received Oct. 19 at Fremont for grading and macadamizing 1.66 miles of road in Sandusky and Rice Townships, Sandusky County, were rejected, and the work will be readvertised.

✚Lisbon, Ohio.—Bids were received Oct. 17 by the Commissioners of Columbiana County for grading and paving with brick 1.06 miles of road in Elkum Township, as follows: GEORGE B. PATTERSON, Wellsville, $13,170 (awarded contract); William McLane, Lisbon, $13,300; Wright & Morris, Lisbon, $13,370; Lee & Griggs, Millersburg, $13,591.

Mount Vernon, Ohio.—Bids will be received at the office of the Commissioners of Knox County until 10 a. m., Oct. 30, for grading and macadamizing 1.06 miles of Columbus Road Extension, Section No. 1 in Hilliar Township, said county, under the provisions of the State highway law. Specifications, plans and profiles are on file in the office of the County Commissioners in Mt. Vernon and at the State Highway Department, Columbus. Estimated cost of construction, $8,218.

✚Upper Sandusky, Ohio.—Bids were received Oct. 18 by the Commissioners of Wyandotte County for grading and macadamizing two miles of road in Marseilles Township, as follows: CARROLL & GRUBER, $12,769 (awarded contract).

Warren, Ohio.—No bids were received Oct. 14 by the Commissioners of Trumbull County for grading and paving with concrete 2.69 miles of road in Hartford Township. The work will be readvertised at a later date.

✚Zanesville, Ohio.—Bids were received Oct. 11 for the improvement of a road in Union Township, Muskingum County, as follows: W. R. KNISELEY, New Philadelphia, bituminous concrete, $7,440 (awarded contract); J. L. Mercer, Trinway, bituminous concrete, $7,993; two courses macadam, $8,390; Adams Bros. Construction Co., Zanesville, $8,270.

Indiana Road Improvements.

Indiana.—Bids for road construction will be received as follows:

Nov. 6: Scottsburg, by the Commissioners of Scott County, until 10 a. m., for a gravel road in Vienna Township. Robert Blount is County Audr.

Brownstown, by the Commissioners of Jackson County, until 1:30 p. m., for the construction of two roads. H. W. Wacker is County Audr.

Nov. 7: Logansport, by the Commissioners of Cass County, until 10 a. m., for one gravel road and one macadam road. J. E. Wallace is County Audr.

Lawrenceburg, by the Commissioners of Dearborn County, until noon, for the construction of highways in Manchester and Jackson Townships. William S. Fagaly is County Audr.

Paoli, by the Commissioners of Orange County, until 2 p. m., for the construction of two roads in Paoli Township. Alvin B. Ham is County Audr.

Winamac, by the Commissioners of Pulaski County, until noon, for the construction of two highways. W. E. Munchenburg is County Audr.

Washington, by the Commissioners of Daviess County, until 10 a. m., for the construction of a gravel road. Thomas Nugent is County Audr.

Madison, by the Commissioners of Jefferson County, until 1 p. m., for the construction of a road in Monroe Township. Andrew M. Taff is County Audr.

Nov. 10: Brazil, by the Commissioners of Clay County, until 11:30 a. m., for the construction of a gravel road in Posey Township. Edgar A. Staggs is County Audr.

West Terre Haute, Ind.—Bids will be received by the Board of Town Trustees until Nov. 6 for constructing 6,396 sq. yds. of brick, wooden block, asphalt or bituminous pavement. W. R. Paige, Terre Haute, is Engr.

✚Detroit, Mich.—Bids were received Oct. 16 by the Department of Parks and Boulevards for constructing about 5,400 sq. yds. of sheet asphalt pavement and the contract was awarded to the CLEVELAND TRINIDAD PAVING CO., Cleveland, Ohio, at $1.58 for Trinidad. Other bids were: Andrews Asphalt Co., Hamilton, Ohio, $1.65 per sq. yd. for Trinidad; Carpenter & Anderson, Grand Rapids, $1.15 for Gilsonite.

✚Alton, Ill.—The contract for paving State St. was awarded Oct. 16 to DAVID RYAN, Alton, as follows: 24,311 sq. yds. block paving on 6-in. macadam base, 3-in. sand cushion, $1.27; 2,000 lin. ft. limestone curb, 58 cts., resetting curb 12 cts. per lin. ft. Other bids for paving were: Curdie & Maupin, $1.36; John Strubel, $1.37; C. H. Degenhardt, $1.27¾; E. A. Burke & Co., $1.36.

Cairo, Ill.—Bids for paving have been received by the Board of Local Improvements, as follows: (a) 15th St., (b) St. Mary's Pl., (c) West 34th St.: Roy L. Williams, (a) $5.654, (b) $12,175, (c) $8,745; Hanes & Son, (a) $5,689, (c) $8,960.

Decatur, Ill.—The city is contemplating the paving of North Jasper, East Williams and East Aves. Estimated cost, $48,775.

Winnetka, Ill.—Bids were received Oct. 17 for the paving of Forest St., Alles Road and Maple Ave. The bidders were as follows: (A) John Hayes Sons' Co., Naperville, Ill.; (B) Alex. N. Todd, 179 Washington St., Chicago, Ill.; (C) John A. McGarry & Co., 1009 Security Bldg., Chicago, Ill.; (D) Western Imp. Co., Racine, Wis.; (E) F. E. Lackey, Winnetka, Ill.; (F) Marquette Const. Co., John O'Gara, Pres., 184 West Washington St., Chicago, Ill.: 7,335 cu. yds. of excavation measured in cut, (A) 35 cts., (B) 25 cts., (C) 31½ cts., (D) 40 cts., (E) 35 cts., (F) 30 cts.; 12,329 sq. yds. of brick paving, pitch filler, 6-in concrete base, 2-in. sand cushion, ¼-in. sand surface dressing, (A) $1.78, (B) $2, (C) $1.96, (D) $1.88, (E) $1.90, (F) $2.03; 12,111 lin. ft. combination curb and gutter, 2 ft. wide, on cinders, including one (1) lb. red mortar color per lin. ft. curb, all excavation and grading, laid complete, (A) 55 cts., (B) 50 cts., (C) 53 cts., (D) 60 cts., (E) 70 cts., (F) 60 cts.; 1,700 lin. ft. 4-in. vitrified glazed farm drain tile 2½ ft. deep, trenches filled with cinders, laid complete, (A) 20 cts., (B) 14 cts., (C) 18 cts. (D) 25 cts., (E) 25 cts., (F) 25 cts.; 150 lin. ft. 8-in. vitrified hub and spigot sewer pipe, 5 ft. deep for sewer and catch basin connections, laid complete, (A) 90 cts., (B) 40 cts., (C) 35 cts., (D) $1; (E) $1, (F) $1; 144 lin. ft. 3-in. × 12-in. plank and curbing, set complete, (A) 25 cts., (B) 20 cts., (C) 20 cts., (D) 25 cts., (E) 25 cts., (F) 25 cts.; 5 new catchbasins, "Duplex covers," 225 lbs., 6 ft. deep, 4 ft. internal diameter, including all materials and labor complete, (A) $40, (B) $40, (C) $32, (D) $40, (E) $40, (F) $40; 35 new "Duplex inlets," 225 lbs., including connections to catch basin, set complete, (A) $10; (B) $10, (C) $12, (D) $15, (E) $10, (F) $10; 35 old catch basins to be adjusted, repaired and cleaned out, (A) $5; (B) $7; (C) $3, (D) $5, (E) $5, (F) $5; 21 old manholes to be adjusted, repaired and cleaned out, (A) $5, (B) $1.50, (C) $2, (D) $5, (E) $5, (F) $5. Totals, (A) $32,514, (B) $33,700, (C) $34,008, (D) $34,995, (E) $35,911, (F) $35,935.

St. Louis, Mo.—The Terminal Association is considering a plan to widen Market St. at Union Station. Estimated cost, $18,000.

✚Hamlin, Tex.—The City Council has awarded a contract to E. BIGBEE, Hamlin, for paving seven blocks of streets with asphalt macadam, and to the McDONALD CONSTRUCTION CO., of Austin, for paving six blocks with granitoid concrete material.

✚San Angelo, Tex.—The City Council has awarded a contract for paving five blocks of streets in the business section to the CREOSOTED WOOD BLOCK CO., Gulfport, Miss.

✚San Antonio, Tex.—The Highland Park Improvement Co. has awarded a contract to the MILLER-PRYOR CONSTRUCTION CO. for laying 75,000 ft. of cement sidewalks, 18,000 lin. ft. of cement curb and 12,000 lin. ft. of cement gutter.

Denver, Colo.—The Board of Public Works have received bids as follows for grading, curbing and otherwise improving East Side Improvement District No. 3: Denver & Pueblo Construction Co., $36,258; Clinton Construction Co., $36,843; Municipal Construction Co., $37,865; J. Fred Roberts, $[illegible]365; Gaffey & Keefe, $36,772; Finer & [illegible]klin, $33,965.

✚Lewiston, Idaho.—A contract for laying 25,000 sq. yds. of pavement has been awarded to the INLAND EMPIRE HAASAM PAVING CO., Spokane, Wash.

Salt Lake City, Utah.—Bids will be received by the Board of Public Works until Nov. 3 for constructing curb and gutter and pavements in Paving Extension No. 68. H. G. McM[illegible]an is Chn.

✚Bellingham, Wash.—The Board of Public Works has awarded to the INDEPENDENT ASPHALT CO. the contract for paving Broadway at $18,332.

Tillamook, Ore.—At a meeting of the Tillamook County Court an appropriation was allowed for building a road from Tillamook along the river to Tillamook Bay. It will be 2[illegible] miles long and 18 ft. wide and will cost approximately $25,000.

Bakersfield, Cal.—Bids will be received by the Board of County Supervisors until Nov. 6, for raising and reconstructing the Coles Levee Road, from Coles Levee to Coles Bridge. H. A. Jastro is Chn. of Bd.

✚Richmond, Cal.—The contract for paving 21st St., from Macdonald to Nevin Ave., has been awarded to L. L. PAGE, at $4,650. The contract for paving Nevin Ave., from Portola Ave. to 23d St., has been awarded to GALBRAITH BROS., at $7,892.

✚San Bernardino, Cal.—A contract has been awarded to the FAIRCHILD-GILMORE-WILTON CO., Pacific Electric Bldg., Los Angeles, at $9,190, for resurfacing D St.

Nordhoff, Cal.—Property owners of the Ojai Valley propose to bond that district for $30,000 for the purpose of constructing a road to Ventura, Cal., and for building several bridges.

✚Pomona, Cal.—G. T. McINTYRE has been awarded the contract for street work on East Holt Ave., from Reservoir St. to Mills Ave., at 5.4 cts. per sq. ft. for grading and paving.

The JOHNSON-SHEA CO. has been awarded the contract for street work on Park Ave., from Orange Grove to North Garey Ave., at 13 cts. per sq. ft. for paving, 31 cts. per lin. ft. for curbing, and street crossings, $12 each.

Ventura, Cal.—It has been decided to construct a reinforced-concrete arch bridge 700 ft. long with 1,000-ft. approaches, over the Ventura River, in connection with the proposed Lincon Coast Route Highway.

MANUFACTURING PLANTS.

(*✚Denotes a contract awarded.*)

✚Lowell, Mass.—The contract has been awarded to the ABERTHAW CONSTRUCTION CO., Boston, for the erection of the reinforced-concrete machine shop of the Lamson Consolidated Store Service Co., Lowell, Mass. The building, 150 × 50 ft., will be four stories high with brick curtain walls. Lockwood, Greene & Co., Boston, are the Archs.

✚Chicopee Falls, Mass.—The contract has been awarded to the FRED T. LEY CO., INC., of Springfield, Mass. and Waterbury, Conn., have been awarded the contract for the factory buildings at the plant of the Fiske Rubber Co. One building will be of brick, 36 × 66 ft. two stories high, with reinforced concrete floors; a cement house will be 18 × 48 ft. 1-story high and an elevator and stair tower will be 4-stories high, 18 ft. square, both of brick, mill construction. THE STAR ELECTRIC CO., Springfield, Mass., has the contract for the electrical work in the new office building and the RHODE ISLAND SUPPLY & ENGINEERING CO., Providence, R. I., has the contracts for the sprinkler systems in the new buildings. George B. Allen, 193 Ashley St., Hartford, Conn., is the Engr. (Noted Aug. 10 and 24.)

Holyoke, Mass.—Contracts for the erection of a factory for the Strathmore Paper Co., have been awarded as follows: mason work, DANIEL O'CONNELL'S SONS; carpenter work, MERRICK LUMBER CO.; cut stone, DAVID McCORMICK & CO.; plumbing, roofing, waterproofing and metal work, THE E. H. FRIEDRICH CO. Samuel M. Green, Inc., of Springfield, Mass., are the Archs.

Plans are being figured on for a new mill on Appleton St. at the plant of the Merrick Lumber Co. Ellsworth & Howes are the Archs.

North Billerica, Mass.—Plans are being drawn for a car and locomotive repair plant for the Boston & Maine R. R. The cost will be about $2,500,000. F. K. Irwin, 136 East Wing, North Station, Boston, is the Engr.

✚West Springfield, (Springfield, P. O.) Mass.—The contract has been awarded to the FRED T. LEY CO., INC., of Springfield, Mass. and Waterbury, Conn., for the erection of eight buildings for the new plant of The Gilbert & Barker Mfg. Co. manufacturers of gas appliances. There will be an office building, 2-stories and basement, 40 × 65 ft., the main factory building, 63 × 105 ft., 2-stories with skylight roof, which will contain the machine shop; the sheet metal building, 160 × 250 ft., 1-story high; furnace building, 83 × 120 ft. 1-story high; two storage buildings, 30 × 90 ft. and 20 x

170 ft., both 1-story high; a power house, 52 × 90 ft., a testing house, 35 × 30 ft., all of brick, mill construction with concrete foundations and granite trim. Edward H. McClintock, 33 Lyman St., Springfield, Mass., is the Engr. (Noted July 20, Aug. 10, Sept. 7 and Oct. 19.)

+**Naugatuck, Conn.**—THE H. WALES LINES CO., Meriden, Conn., have been awarded the entire contract for the erection of an addition to the reclaiming plant for The United States Rubber Co. The building will be, 152 × 153 ft., 1 and 2-stories high, of brick, mill construction and will cost about $50,000. Knight C. Richmond, Providence, R. I., is the Engr.

New Haven, Conn.—The Gillette Construction Co. will do the mason work and S. C. Russell the carpenter work on a building to be erected on York St. near Elm St. for H. M. Hodges & Bro. It will be of brick, 50 × 80 ft. and 4-stories high. An elevator will be required.

Seymour, Conn.—The greater part of the plant of the H. A. Mathews Co. was destroyed by fire, recently, causing a loss of about $75,000. It is reported that the building will be rebuilt soon.

+**South Norwalk, Conn.**—Contracts for an addition to the plant of the J. & J. Cash Co., have been awarded as follows: mason work, W. H. SMITH; carpenter work, H. W. MATHER; plumbing, roofing and metal work, JONES & HOTCHKISS, Norwalk, Conn. The building will be 36 × 125 ft., 1 and 2-stories high of brick and steel. The plans were drawn by Pell & Corbett, Archs., 24th St., New York City.

+**Waterbury, Conn.**—The contract for carpentry work has been awarded to GEORGE A. UPHAM, and to CHATFIELD & CHATFIELD, INC., for the mason work for the two factory buildings at the plant of the Shoe Hardware Co. on Brown St. One building will be 86 × 90 ft., 5-stories high of brick, mill construction, with bluestone trim and pressed brick front, freight elevator and steam heat, the other will be 33 × 43 ft. 3-stories and basement, of the same construction with plain front. E. E. Benedict, 51 Leavenworth St., Waterbury, is the Arch. (Noted Aug. 31 and Sept. 14.)

Buffalo, N. Y.—The Fenton Box Co., has completed plans for a 1-story brick addition, which it will make to its box factory at Scoville St. and the Pennsylvania R. R.

Salamanca, N. Y.—The Salamanca Furniture Co., is having plans drawn for a 4-story and basement addition, 53 × 159 ft., to be made to its factory building.

Salamanca, N. Y.—The Salamanca Mirror Co. is taking bids for a 1-story factory building, 55 × 160 ft., from plans by John Connellan, Arch., Rochester.

+**Erie, Pa.**—The contract has been awarded to the PITTSBURGH BRIDGE & IRON CO., for the construction of two factory buildings at Erie, Pa., for the Erie Forge Co.

New Brighton, Pa.—Two additions will be erected by the Asbestos Falls Metal Co. One of the additions will be used as a storage house.

Philadelphia, Pa.—The Quaker Lace Co., Philadelphia, Pa., has been incorporated, capitalized at $2,500.000.

West York, Pa.—The Souter Silk Mfg. Co. has been incorporated with a capital of $25,000.

Baltimore, Md.—Bids are being asked by Henry Smith & Sons, 116 South Regester St., for the construction of a 7-story factory building, to cost about $700.000, for the Gas & Electric Co. J. E. Alfred is the Pres.

Baltimore, Md.—The American Cigar Machine Co., will erect a 300 × 300 ft. factory. Plans will be prepared shortly.

Richmond, Va.—The Grasberger Vehicle Co., J. Grasberger, Pres., will enlarge its plant from 95 × 50 ft. to 150 × 60 ft.

Richmond, Va.—Kline Motor Car Co. S. W. Meek, Vice-Pres., and Gen. Mgr., is having plans prepared for a proposed automobile factory. The cost will be about $65,000.

Memphis, Tenn.—The Chickasaw Motor Car Co., Memphis, has been incorporated with a capital of $25,000 to deal in automobiles and erect a repair shop. Plans have been prepared for a building, 40 × 200 ft., with an L 20 × 60 ft.

Memphis, Tenn.—Plans have been completed by Hanker & Carins, Archs., for the construction of a 4-story and basement factory and office-building. The cost will be about $70,000.

Newport, Ky.—The Crystal Ice Co. has been incorporated with a capital of $100,000 to erect and operate an ice manufactory. The incorporators are Joseph Adams, Benjamin A. Adams and William Schmidt.

Cleveland, Ohio.—The American Box Co. will erect a factory and boiler house on West Third St. The structure will be of brick, 64 × 96 ft., and two stories high.

Lorain, Ohio.—The Ranney Fish Co., Lorain, will erect a cold storage plant.

Columbus, Ohio.—Plans have been completed for the construction of a 4-story factory building by Frank L. Packard, Hayden Bldg. The Riley Globe Mfg. Co., South Front St. is the owner. The cost is about $50,000.

+**Cleveland, Ohio.**—A 4-story factory building will be erected by Rauch & Lang Carriage Co., 623 Superior Ave. The contract is held by H. C. SLATMYER, 203 Lakeside Ave. Plans were prepared by the Osborn Engineering Co., 504 Osborn Bldg.

Decatur, Ind.—The Holland-St. Louis Sugar Co., is preparing to build and equip a beet sugar refining plant in Decatur. The company is capitalized at $2,800,000. L. G. Ellingham, Secy. of State, is interested.

Elwood, Ind.—The Tipton & Berry Cigar Co., has purchased the Batchfield block on West Main St., and will soon ask for bids for the complete remodeling and reconstruction of the building into a modern manufacturing factory.

Lawrenceburg, Ind.—The Greenman Brothers' Furniture Manufacturing Co. has increased its capital to $150,000 and will erect a large addition to its plant.

+**South Bend, Ind.**—The Muessel Brewing Co., will receive bids in a short time for the construction of a large addition to its plant. Estimated cost, $100,000. A contract for the masonry work has been let to KEMBLE & KUEHN, South Bend.

+**Bay City, Mich.**—The Industrial Works Co., Bay City, have awarded the concrete work for an extension to the factory at Bay City, to the McARTHUR CONCRETE PILE & FOUNDATION CO., 11 Pine St., New York City.

Detroit, Mich.—It is reported that a steel plant will be erected to cost $1,500.000 in Detroit by Cleveland and Detroit men. It is understood that the new plant will furnish an outlet for the pig iron of the Detroit Iron & Steel Co., of which D. R. Hanna, of M. A. Hanna & Co., is Pres.

The Hupp Motor Car Co., Detroit, has secured a site and plans are being prepared for the erection of an automobile factory.

Grand Rapids, Mich.—J. A. Klise, Secy. of the American Carving & Manufacturing Co., is organizing a wood-molding company. A 2-story factory, 100 × 200 ft., will be erected.

J. Van Duren & Co., Grand Rapids, have purchased a site and will construct a factory.

Holland, Mich.—The Holland Gelatine Co. will construct a large plant for the installation of a new process in the manufacture of gelatine and glue.

Bay City, Mich.—Plans are being prepared by G. A. Mueller, Breilmeyer Bldg., Detroit, for a wash house, pitching and racking room for the Bay City Brewing Co., Bay City.

+**Detroit, Mich.**—R. E. Roseman, 1302 Penobscot Bldg., Detroit, has awarded the following contracts for the construction of a 3-story automobile factory for the Cadillac Motor Car Co.: composition roofing, to R. HULTON & CO., 116 Foot St., East; painting, to ANDERSON & RIP, 180 Grand River. The cost will be about $60,000.

Plans are being prepared by R. E. Raseman, 1302 Penobscot Bldg., for the construction of a power-house for the Cadillac Motor Co., W. C. Leland, Gen. Mgr., 1243 Cass Ave. The building will be constructed of reinforced concrete and structural iron and will cost about $30,000.

An 8-story flour mill will be erected by the Commercial Milling Co. The cost is $75,000.

Aurora, Ill.—The Wedron Sand & Clay Products Co., Aurora, Ill., has been incorporated with a capital of $100,000. The incorporators are George R. Ackerman, John M. Raymond and N. W. Evans.

Chicago, Ill.—The Schlitz Brewing Co., Milwaukee, Wis., will probably erect an ice plant at the foot of Walnut St. The structure will be 146 × 160 ft.

+**Green Bay, Wis.**—The HARTMAN MACHINE & BOILER WORKS have the contract for a smokestack, 4 ft. in diameter and 133 ft. high, to be erected at the plant of the Cargill Elevator Co.

Milwaukee, Wis.—H. M. Odgen is having plans prepared for a factory building by Schnetzky & Son, Archs., 1320 Cedar St. The structure will be four stories high, 50 x 150 ft., of brick, stone and concrete construction. Bids will be received in a few days.

Plans have been completed by the Pfister-Vogel Leather Co., for a $100,000 warehouse at 475 Virginia St., and a $60,000 office building at 453 Virginia St., Excavation costs are $12.000 and $10,000, respectively. Fred Vogel, Jr., is Pres.

A manufacturing plant is being contemplated by the Milwaukee Concrete Mixer & Machinery Co. No site has yet been chosen. Estimated cost is $50,000. R. J. Schwab is Pres.

Des Moines, Iowa.—The Handy Wagon Co. will erect an addition to its plant at Eighth and Murphy Sts. The addition will be 24 × 300 ft.

W. M. Campbell, Pittsburgh, Pa., will erect a bakery at Des Moines. The structure and machinery will cost approximately $60,000.

Concordia, Kan.—Plans are being prepared for the construction of an ice, storage and packing plant by the Tait-Nordemeyer Engineering Co., Leggett Bldg., St. Louis, Mo.

Austin, Tex.—The Mamie B. Manufacturing Co. has been incorporated with a capital stock of $30,000 to construct and operate a plant for manufacturing cotton chopper machines. The incorporators are W. B. Alexander, T. J. Cristal and Otto Ebeling.

Dallas, Tex.—The Standard Water Meter Co. has been formed here with a capital stock of $10,000. The incorporators are G. K. Garrison, C. A. Chase and T. P. Roberts.

Berclair, Tex.—Patricia Gonzales will establish a buggy and carriage factory here.

Cleburne, Tex.—The Cleburne Motor Car Manufacturing Co. has been formed here to install a plant for the manufacture of automobiles. The erection of the factory will soon be started, it is stated.

Gonzales, Tex.—The Gonzales Bridge & Iron Co. has begun the erection of its factory here, which will be devoted to the manufacture of bridge material.

Temple, Tex.—The Commercial Club is promoting the establishment here of a large iron foundry and machine shops. A. Alstadt is back of the project.

Cerrillos, N. Mex.—The Sunset Mining & Smelting Co., of Cerrillos, will install a concentrator at its property at that place. The headquarters of the company are at Cerrillos.

Ray, Ariz.—The Ray Central Mining Co. will install a large mill and other machinery and make general improvements to its property, situated at Ray, at a cost of about $1,500,000, according to estimates made by the Board of Directors.

Sarnia, Ont.—The Imperial Oil Co. is completing plans for extensive additions to be made to its oil refining plant here.

St. Catherines, Ont.—Plans have been completed for a foundry building, 120 × 240 ft., and a machine shop, 200 × 200 ft., to be erected by the Steam & Radiation Co., Ltd., of Toronto, manufacturers of radiators and boilers, on a 35-acre site, recently purchased for its new plant here.

Hostotipaquillo (Jalisco), Mex.—The Mololoa Mining Co. will install a reduction plant at its mine near Hostotipaquillo. W. M. Matthews is Gen. Mgr.

San Luis Potosi, Mex.—The Deutz Brothers and associates will install here a plant for the manufacture of machines for shredding the fiber of the maguey plant. A company has been formed under the name of the Compania Desfibradora Forseck, S. A., to erect and operate the proposed plant.

The Mexican Packing Co. will soon begin the erection of a large meat-packing plant here. This company obtained a concession for the proposed enterprise some time ago from the Federal government.

MISCELLANEOUS CONTRACTS.

*(*Denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and Irrigation projects, etc., will be found under Water Supply—Irrigation.

Dredging.—Boston, Mass.—Bids will be received until Oct. 30 by the Public Works Department for dredging at Calf Pasture pumping station. Louis K. Rourke is Comr.

Waterfront Improvements.—Boston, Mass.—The Bureau of Yards and Docks, Navy Dept., Washington, D. C., received bids as follows on Oct. 21 for waterfront improvements at the Boston Navy Yard: George T. Rendle, 28 School St., Boston, Item (1) $81,650, (2) $79,111, (3) $76,184, (4) 35 and 40 cts., (5) $74,435, (6) $69,180, (7) 35 and 40 cts., (8) $2,241; Lawler Bros., 16 City Sq., Charlestown, Mass., (1) $82.185, (2) $76,921, (3) $72,284, (4) 30 and 38 cts., (5) $59,834, (6) $53,730, (7) 30 and 38 cts., (8) $2.250; Riverside Contracting Co., 39 Cortlandt St., New York, (1) $72,211, (2) $69,146, (3) $65,056, (4) 27 cts., (5) $63,806, (6) $56,916, (7) 27 cts., (8) $2.200.

Rock Excavation.—Boston, Mass.—Bids will be received until noon, Nov. 20, by Col. Frederic V. Abbot, Corps Engrs., U. S. A., Boston, for rock excavation in Weymouth, Fore River, Mass.

+***Bulkhead.**—Providence, R. I.—The contract has been awarded by the Board of Contract and Supply to ROY H. BEATTIE, Inc., of Fall River, Mass., for the construction of a bulkhead wall or river wall about 1,400 ft. long, at $233,646. Bids were opened on Oct. 3.

Cable Subway.—Buffalo, N. Y.—The New York Telephone Co. will construct a cable subway between Buffalo, Tonawanda and Niagara Falls to contain "quad" cables aggregating 400 wires to give storm protected service to the numerous manufacturing plants along the Niagara frontier between the cities named.

+**Dredging.**—Buffalo, N. Y.—The Commissioner of Public Works has been authorized to contract with the LAKE ERIE DREDGING CO. for dredging Buffalo Inner Harbor to the completed contract depth for maintenance of channel from June 30, 1911, to July 1, 1912, in accordance with plans and specifications on file in the Bureau of Engineering at 29½ cts. per cu. yd.

+***Dredging, Etc.**—Buffalo, N. Y.—The contract has been awarded to the EMPIRE ENGINEERING CORPORATION, 60 Wall St., New York, for dredging in North (Buffalo River) Entrance Channel, removing rock shoals outside North Entrance, and removing the Watson Elevator site, Buffalo Harbor, at $89,300. Bids were opened on Oct. 2 by Lt.-Col. J. G. Warren, Corps Engrs., U. S. A., Buffalo. List of bidders noted on Oct. 12.

***Concrete.**—Montezuma, N. Y.—The McKinser Construction Co., Montezuma, has to let 25,000 cu. yds. of concrete, including piling and other work, Barge Canal, Montezuma.

Field House.—New York, N. Y.—Bids will be received until 3 p. m., Nov. 2, by the Park Board, Dept. of Parks, Boro. Manhattan, for all labor and materials required for the erection and completion of a field house in the West 59th St. playground, located on the north side of West 59th St., 400 ft. west of Amsterdam Ave.

+***Retaining Wall, Drain.**—Trenton, N. J.—Bids were received as follows on Oct. 17 by the Executive Department, State House, Trenton, for all labor and materials necessary for the complete construction of a concrete retaining wall along the Delaware River, and for a concrete drain: Retaining wall—Gibbs & Morgan, Trenton, $28.420; John H. Hurley, Trenton, $27,840; Filbert Paving & Construction Co., Philadelphia, Pa., $23,594; J. F. Shanley Co., Philadelphia, $20,880; WHITING-TURNER CONSTRUCTION CO., Baltimore, Md., $15,660 (awarded contract); Joseph H. Cutley, Jersey City, N. J., $19,720; H. H. Holmes, Jersey City, $17,632; Jesse A. Howland, Seabright, N. J., $18,258; P. J. Monaghan, South Amboy, N. J., $16,008. Drain—Filbert Paving & Construction Co., Philadelphia, $10.395; Richard Hopkins, informal; Joseph H. Cutley, Jersey City, $8,548; Whiting Turner Construction Co., Baltimore, Md., $7,603; John H. Hurley, Trenton, N. J., $11,088; H. H. Holmes, Jersey City, N. J., $8,050; Antonio de Lucia, Trenton, N. J., $8,941; Gibbs & Morgan, Trenton, N. J., $10,662; P. J. MONAGHAN, South Amboy, N. J., $5,907 (awarded contract).

Tunnel.—Pittsburgh, Pa.—The city is considering the construction of a tunnel from Spring Garden Ave. to Ohio St., North Side. Estimated cost, about $250.000. N. S. Sprague is City Engr.

***Pier and Bulkhead.**—Philadelphia, Pa.—Bids will be received until noon, Nov. 20, by Joseph F. Hasskarl, Dir. Dept. of Wharves, Docks and Ferries, 555 Bourse Bldg., Philadelphia, for the construction of a pier and bulkhead at the foot of Dock and Spruce Sts., in the Delaware River. The bidder's attention is called to the fact that the Department has money available as follows: Item 26-D-6, $20,500 for building bulkheads, and Item 26-D-7, for the construction of one single-deck pier at Dock St., $250,000, and the contractor will be required if necessary to enter into a supplemental contract or contracts for the completion of the work upon the request of the Director of the Department of Wharves, Docks and Ferries, when further appropriations are made or become available. For further details see advertisement in this issue.

+**Steamers.**—Sparrows Point, Md.—The contract has been awarded to the MARYLAND STEEL CO., of Sparrows Point, for constructing four 425-ft. steamers for the American-Hawaiian Steamship Co. Estimated cost, $2,000,000.

Projectiles.—Washington, D. C.—Bids were received as follows on Oct. 20 by the Chief of Ordnance, War Dept., Washington, for furnishing the following projectiles, (a) 200 6-in. A. P. shells, Model 1911; (b) 100 12-in. D. P. mortar, Model 1898, 824 lbs.; (c) 100 12-in. D. P. mortar, Model 1898, 1,046 lbs.; (d) 100 14-in. A. P. shot, Model 1909: Bethlehem Steel Co., South Bethlehem, Pa., (a) $35, (b) $253.60, (c) $315, (d) $575; Midvale Steel Co., Philadelphia, Pa., (a) $43.75, (b) $317, (c) $393.75, (d) $718.75; Washington Steel & Ordnance Co., Washington, (b) $226.40, (c) $284.75; Hadfield Steel Co., England, (d) $450 for 100; $425 for 200.

+**Cranes.**—Washington D. C.—The contract has been awarded to the BROWNING ENGINEERING CO., of Cleveland, Ohio, for furnishing two 15-ton locomotive jib cranes at the navy yards at Norfolk and Mare Island, Cal., at $11,108. List of bidders noted on Oct. 5.

Steel Pipe, Copper, Etc.—Washington, D. C.—Bids will be received until Oct. 31 by the Bureau of Supplies and Accounts, Navy Dept., Washington, for furnishing the following supplies at the navy yards and naval stations: Mare Island, Vallejo, Cal., Schedule 3,974, 184,800 lbs. of medium bar steel, miscellaneous cold rolled steel, miscellaneous galvanized and black steel shapes, 14,000 lbs. galvanized sheet steel, and 29,300 lbs. of black sheet steel; Schedule 3,975, 17,700 lbs. lead pipe; Schedule 3,976, 100 M ft. Oregon pine; Schedule 3,978, 9,700 ft. plough steel wire rope; Schedule 3,979 11,000 lbs. condenser tube sheets, miscellaneous iron pipe fittings, 2,000 lbs. copper pipe, 3,500 ft. iron or steel pipe, 7,000 lbs. condenser ferrule tubing, 60,000 lbs. ingot copper, and until Nov. 7, as follows: Mare Island, Cal., Schedule 3,990, 25 M ft. Oregon pine; Schedule 3,993, 2,350 lbs. sheet copper; Schedule 3,993, 31,100 lbs. steel nuts; Schedule 3,992, miscellaneous brass and copper wire, 3,000 lbs. galvanized steel wire, 150 lbs. phosphor-bronze wire. Newport, R. I., Schedule 4,020, miscellaneous, c.-i. pipe and fittings, four gate valves, 2,800 lbs. pig lead. Boston, Mass., Schedule 4.023, 37,000 lbs. cast steel crucible wire, 9,800 lbs. sheet lead, 3,240 lbs. sheet zinc, Norfolk, Va., Schedule 4,022, 12 M ft. oak timber, 10 M. ft. white pine, 50 M ft. yellow pine. Washington, D. C., Schedule 4.020, 37.500 lbs. hot rolled or forged steel. Brooklyn, N. Y., Schedule 4,023, 3,700 lbs. galvanized steel shapes. Application for proposals should designate the schedules desired by number.

Road Oil.—Washington, D. C.—Bids were received as follows on Oct. 12 by the District Commissioners for furnishing about 100,000 gallons of emulsifying road oil: Headley Good Roads Co., Real Estate Trust Bldg., Philadelphia, Pa., Class 2, 4.5 cts.; Class 3, 5.25 cts.; Class 5, 5.75 cts. (delivery at Second and N Sts.); 4.5 cts., 5.25 cts., and 5.75 cts., respectively (delivery at Uniontown); 4.75 cts., 5.5 cts., and 6 cts., respectively (delivery at Rosslyn, Chevy Chase, Bethesda, Takoma, Brookland and Deanswood. Standard Oil Co., Pier 2, Pratt St., Baltimore, Md., 3.48 cts. (delivery Second and N Sts.); all other points, 3.68 cts. Good Roads Improvement Co., Cincinnati, Ohio, delivery all points, 3.75 cts. The Sun Co., Philadelphia, Pa., delivery all points, 3.98 cts.

✚Stable.—Washington, D. C. — The contract or the construction of a stable for the Street Cleaning Department has been awarded to the DAVIS CONSTRUCTION CO., of Washington, at $60,782. Bids were opened by the District Commissioners on Oct. 11. List of bidders noted on Oct. 19.

Cable.—Washington, D. C.—Bids will be received until Oct. 28 by Capt. R. J. Burt, Disbursing Officer, Signal Corps, U. S. A., Washington, for furnishing four miles of rubber-insulated submarine cable, Type 51, under Proposal No. 555

Wire.—Washington, D. C.—Bids were received as follows on Oct. 12 by the Chief Signal Officer, U. S. A., Washington, for furnishing 15 miles of galvanized wire, 240 miles of iron wire, and 18,000 ft. of phosphor bronze wire: Item (1), 15 miles of galvanized steel wire, No. 6; (2), 240 miles galvanized iron wire, No. 14 (3), 18,000 ft. phosphor bronze wire. No. 14: Western Electric Co., 463 West St., New York, Item (1) 2.8 cts., (2) 4.8 cts., (3) $33.08 per M. ft.; American Electrical Works, Phillipsdale, R. I., (1) $2.60 per 100 lbs., (2) $4.25 per 100 lbs.; John A. Roebling's Sons Co., Trenton, N. J., (1) $2.45 per 100 lbs., (2) $4.35 per 100 lbs., (3) $39 per M. ft.; Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y., (2) 4 cts. per lb.; The Riverside Metal Co., Riverside, N. J., (3) $31.25 per M. ft.

Bronze, Steel, etc.—Washington, D. C.—The Bureau of Supplies and Accounts, Navy Dept., Washington, will receive bids until Nov. 14 for furnishing 3,400 lbs. of red bronze, Schedule 4037; 5,100 lbs. of bulb angle steel, Schedule 4036; 22,400 lbs. of ingot tin, Schedule 4039, delivery navy-yard, Norfolk, Va.; 8,700 lbs. of galvanized plate steel, Schedule 4036, delivery Norfolk and Charleston, S. C.; and until same date for furnishing 2,000 lbs. of sheathing copper, Schedule 4037, delivery Charleston, S. C.

***Barges.**—Wheeling, W. Va.—Bids will be received until 11 a. m., Nov. 23, by Maj. F. W. Alstaetter, Corps Engrs., U. S. A., Wheeling, for furnishing and delivering two wooden hull gravel barges Nos. 13 and 14 for Dam No. 28, Ohio River.

Removing Wreck.—Jacksonville, Fla.—Bids were received as follows on Oct. 20 by Capt. J. R. Slattery, Corps Engrs., U. S. A., Jacksonville, for removing the wreck "Zeeburg" from St. Johns River: Merritt-Chapman Derrick & Wrecking Co., New York, $68,872; Johnston & Virden, Lewes, Del., $46,400.

Wharf.—Pensacola, Fla.—The Louisville & Nashville R. R. Co. has decided, it is reported, to construct a wharf to extend 1,800 ft. into the harbor. Estimated cost, about $250,000. F. C. Flyn is Asst. Engr., Pensacola.

✚Steel and Cast Iron.—New Orleans, La.—Bids were received as follows on Oct. 17 by the Board of Commissioners of the Port of New Orleans for the fabrication and erection of the structural steel and cast iron for the Press St. shed: ELKHART BRIDGE CO., Elkhart, Ind., $8,610 (awarded contract); Joliet Bridge Co., $9,555; H. F. Grimm, $9,797; Virginia Bridge & Iron Works, $9,831; Converse Bridge Co., $9,939; Fort Pitt Bridge Works, $10,000; Indiana Bridge Co., $10,050; Belmont Iron Works, $10,500; Kenwood Bridge Co., $10,565; Nolke Richard, $10,755; Central States Bridge Co., $10,809; Penn Bridge Co., $10,848; McClintic-Marshall Construction Co., $11,628; L. Schreiber & Sons, $11,962.

✚Levees.—New Orleans, La.—The State Board of Engineers on Oct. 10 awarded contracts as follows for levee work: For a levee in Avoyelles Parish, known as the Ben Ruth Lake Levee, to R. J. JOHNSON, at 45 cts. per cu. yd. The work will consist of about 65,000 cu yds. on the right bank of the Red River; to SCHAYORT & MEYERS for the Linwood Levee, on left bank of Mississippi River, in Plaquemines Parish, contents 55,000 cu. yds., at 18.7 cts. per cu. yd.; to WILMER HENRITZEY, for Doullut's Canal Levee, on right bank of the Mississippi River, in Plaquemines Parish at 18.2 cts. The work will consist of capping, reveting and earthwork about 2,000 cu. yds. of earth.

***Locomotive Crane.**—Memphis, Tenn.—Bids will be received until noon, Nov. 24, by Maj. Clarke S. Smith, Corps Engrs., U. S. A., Memphis, for furnishing one locomotive crane.

Bath-House.—Cleveland, Ohio.—Bids will be received until noon Oct. 27, by the Director of Public Service for the construction of a bath-house at Gordon Park.

Ditch.—Princeton, Ind.—The Commissioners of Gibson County have received plans and specifications for the construction of a ditch in [illegible] Township. Estimated cost, $1[illegible]. Bids will soon be asked.

Rock.—Alpena, Mich.—Bids were received as follows on Oct. [illegible] by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, Mich., for furnishing about 1,000 tons of rock for piers at Alpena: J. D. Kennedy, Detroit, [illegible] per ton; Green Stone & Quarrying Co., Sawyer, Wis., $3.

Docks.—Benton Harbor, Mich.—The Graham-Morton Co., it is reported, will construct new docks, including a warehouse two stories high. Estimated cost, $50,000.

Lumber.—Detroit, Mich.—Bids for furnishing and delivering about 3,580,000 ft. B. M. of timber for use at St. Marys Falls Canal, Mich., were received on Oct 16 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, as follows, (a) Lot I., 2,913,840 ft. B. M.; (b) Lot II., 236,072 ft. B. M.; (c) Lot III., 433,152 ft. B. M.: McCormick Lumber Co., McCormick, Wash., (a) $7.50 (b) $57.50, prices based on receiving award for both lots or none; C. M. McCoy, Minneapolis, Minn., unit prices not given; totals, (a) $24,005, (b) $8,731, (c) $3,552, based on f. o. b. cars,

LIST OF CONTRACTS PENDING

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
10-28	Impvts. to quarters, Vallejo, Cal (S.)	9-21
11- 1*	Head gates, Boise, Idaho (S)	9-28
11- 1*	Subway and stations, Toronto, Ont. (P. & S.)	10- 5
11-10	and 11 Building, Hawaii (S.)	9-21
11-10	and 11, Storehouse, Hawaii. (S.)	9-21
11-11	Heating system, Arlington, Va. (S.)	10-12
11-11	Quarters, Vallejo, Cal. (S.)	10-12
11-17	Filtration plant, Rock Island, Ill. (S.)	10-26
11-18	Walks, etc, Annapolis, Md. (S)	10-26

Light, Heat and Power Plants.

Bids close.		Noted in issue of
10-27	Conduit line, Pittsburgh Pa.	10-26
10-27	Lighting system and standards, Columbus, Ohio	10-26
10-27	Addition to power-house, Wooster, Ohio	10-26
10-27	Electric light plant, Pocahontas, Iowa	10-26
10-28	Gas mains, Duluth, Minn.	10-26
10-31	Heating system, New York	10-26
11- 1	Lighting fixtures and rewiring, Madison, Wis.	10-26
11- 1	Railway cars, San Francisco, Cal.	10- 5
11- 2	Wiring, Seguin, Tex.	10-26
11- 3	Lamps, Winnipeg, Man.	10-26
11- 3	Repairs to heating system, New York, N. Y.	10-26
11- 4	Pavement, Newport, R. I. (S)	10-12
11- 4	Street lighting, Champaign, Ill.	10-19
11- 7	Machinery, New Orleans, La.	10-26
11- 8	Boilers and boiler-room equipment, Ottawa, Ont.	10-26
11- 9	Boiler house, New York	10-26
11- 9	Lighting fixtures, Portland, Me.	10-26
11-11	Hot-water heating system, Arlington, Va.	10-12
11-24*	Equipment for power station, Lethbridge, Alta.	10- 5
12- 7	Power machinery, New Orleans, La.	10-12

Bridges.

10-27	Bridge work, Cincinnati, O.	10-12
10-27*	Bridge, Kansas City, Mo.	10-19
10-27*	Bridge, Saginaw, Mich.	10-19
10-27	Bridge, Pittsburgh, Pa.	10-26
10-28	Bridge, Surry, Va.	10-19
10-28	Bridge work, Cleveland, Ohio,	10- 5
10-30	Bridge work, Morton, Minn.	10-12
10-30	Bridge, Los Angeles, Cal.	10-26
10-30	Bridges, Los Angeles, Cal.	10-26
10-31	Bridges, Wise, Va.	10-19
11- 1	Bridge work, Cleveland, Ohio,	10- 5
11- 1*	Bridges, Angleton, Tex.	10-19
11- 2	Bridge approaches, Columbus, Ohio	10-12
11- 2	Bridge, Jersey City, N. J.	10-26
11- 3	Bridges, Jonesville, Va.	10-26
11- 6	Bridge, Lisbon, Ohio	10-26
11- 6	Bridge, Holtville, Cal.	10-26
11- 7	Bridge, Cedar Rapids, Neb.	10-26
11-13	Bridge, Boston, Mass.	10-26
11-13	Bridge work, Zanesville, O.	10-26
11-13	Bridge work, Wash., Pa.	10-26
11-14	Bridge, Jasper, Ind.	10-26
11-15	Bridge, Marble Rock, Iowa	10-26
11-20	Bridges, Houston, Tex.	10- 5
11-25	Bridge, Toledo, Ohio	10-26
12- 1*	Superstructure, Portland, Ore.	10-19

Buildings.

Bids close.		Noted in issue of
10-31*	U. S. post-office, Florence, Ala.	9-21
10-31*	U. S. post-office, Minneapolis, Minn.	9-14
10-31	School buildings, Pasadena, Cal.	10- 5
10-31	Power plant, New York, N. Y. (Mfg. Pl.)	10-26
11- 1	Building, Raleigh, N. C.	10- 5
11- 1	Plans and specifications, library, Muskogee, Okla.	9-28
11- 1	School bldg., Placentia, Cal.	10-19
11- 6	Alterations to hospital, Bakersfield, Cal.	10-26
11-11	Quarters, Vallejo, Cal.	10-12
11-16	Building, Wash., D. C.	10-12
11-20	U. S. post-office, Dayton, O.	10-19
11-22	U. S. post-office, Jersey City, N. J.	10-19
11-27*	U. S. post-office, Huron, S. Dak.	10-19
11-29	U. S. post-office, Bloomington, Ind.	10-19
12- 2*	U. S. post-office, Parsons, Kan.	10-19
12- 5	U. S. post-office, Union City Tenn.	10-19
12- 5	Infirmary, Rockville, Ind.	10-19
12-14*	U. S. post-office, Homestead, Pa.	10-19

Water-Works.

10-27	Gate-valves, Victoria, B. C.	10-19
10-27	Water pipe, Boston, Mass.	10-26
10-28	Watermains, Duluth, Minn.	10-26
10-30*	Canal, San Antonio, Tex.	10-19
10-31*	Conduit, New York	10-19
10-31	Watermain, Columbia, S. C.	10-19
10-31	Water tunnel, Cleveland, O.	10-19
10-31	Flume work, Wisdom, Mont.	9-28
10-31	Water-main, Cleveland Hgts., Ohio	9-28
10-31*	Water works, New York	10-12
11- 1*	Head gates, Boise Falls, Idaho	9-28
11- 1	Water-works, Jellico, Tenn.	10-12
11- 1	C.-I. pipe, St. Charles, Ill.	10-12
11- 2*	Watermains, Bement, Ill.	10-26
11- 7	Water mains, McIntosh, Minn.	10-26
11- 7	Water system, Amory, Miss.	10-26
11- 9	Pumping engine, Washington, D. C.	10-26
11-15*	Water supply, Cumberland, Md.	10-26
11-15	Water-works, Loreauville, La.	10-19
11-15*	Water supply, Cumberland, Md.	10-19
11-15*	Water-mains, Pensacola, Fla.	10-19
11-17	Filtration plant, Rock Island, Ill.	10-26
11-17	Siphons, Los Angeles, Cal.	10-26
11-21*	Water-works, Obion, Tenn.	10-26

Sewers.

10-30	Sewer, San Bernardino, Cal.	10-26
10-30*	Sewers, Richmond, Va.	10-26
10-30	Sewer, Willimantic, Conn.	10-26
10-30	Sewer, Hartford, Conn.	10-26
10-27	Sewers, Pittsburgh, Pa.	10-26
10-30	Sewer, etc., Morrisville, N.J.	10-26
10-30	Sewers, Summerville, Ga.	9-21
10-31	Sewer, Summit, N. J.	10-26
10-31	Sewers, Montreal, Que.	10-26
11- 1	Sewers, Jellico, Tenn.	10-12
11- 1	Sewers, Huntington, W. Va.	10-12
11- 2*	Sewer system, Ligonier, Pa.	10-19
11- 3	Sewer Spokane, Wash.	10-26
11- 7	Sewer system, Amory, Miss.	10-26
11-15	Sewers, Pryor Creek, Okla.	10-19
11-16	Sewers, Sudbury, Ont.	10-26

Streets and Roads.

Bids close.		Noted in issue of
10-26	Grading, etc., Newark, N. J.	10-26
10-27	Paving, etc., Pittsburgh, Pa.	10-26
10-27	Paving, etc., Jacksonville, Fla.	10-26
10-27	Road improvement, Cincinnati, Ohio	10- 5
10-30	Grading, etc., Moulton, Ala.	10- 5
10-30	Crushed stone, Hartford, Conn.	10-12
10-30	Sidewalks, Gadsden, Ala.	10-12
10-30	Graveling, London, Ohio	10-19
10-30	Road, Mount Vernon, Ohio	10-26
10-30	Paving, Boston, Mass.	10-26
10-30	Fill, Boston, Mass.	10-26
10-30	Paving, Valley Forge, Va.	10-26
10-31	Grading, Wise, Va.	10-26
11- 1	Paving, etc., Pine Bluff, Ark.	10-19
11- 1	Paving, Huntington, W. Va.	10-12
11- 2	Paving, etc., New York	10-26
11- 3	Paving, etc., Salt Lake City, Utah	10-26
11- 3	Road improvement, Cincinnati, Ohio	10-12
11- 3*	Paving, Collingswood, N. J.	10-19
11- 3	Gravel road, Indianapolis, Ind.	10-19
11- 4	Macadam roads, Greencastle, Ind.	10-19
11- 4	Paving, Newport, R. I.	10-12
11- 6	Stone road, Jasper, Ind.	10- 5
11- 6	Road impve., Brandon, Miss.	10-19
11- 6	Gravel roads, Brownstown, Ind.	10-19
11- 6	Macadam road, Decatur, Ind.	10-19
11- 6	Roads, English, Ind.	10-19
11- 6	Stone road, Fowler, Ind.	10-19
11- 6	Stone road, Huntington, Ind.	10-19
11- 6	Stone roads, Rensselaer, Ind.	10-19
11- 6	Gravel road, Rising Sun, Ind.	10-19
11- 6	Gravel roads, Tyston, Ind.	10-19
11- 6	Paving, West Terre Haute, Ind.	10-26
11- 6	Paving, etc., Newark, N. J.	10-26
11- 6	Road work, Bakersfield, Cal.	10-26
11- 6	Gravel road, Scottsburg, Ind.	10-26
11- 6	Roads, Brownstown, Ind.	10-26
11- 7	Highways, Lawrenceburg, Ind.	10-19
11- 7	Macadam road, Logansport, Ind.	10-19
11- 7	Roads, Paoli, Ind.	10-19
11- 7	Road improvement, Cleveland Heights, Ohio	10-19
11- 7	Grading, etc., Camden, Ala.	10-19
11- 7	Curbs and sidewalks, Lake Charles, La.	10-12
11- 7*	Paving and curbing, Pensacola, Fla.	10-12
11- 7	Gravel road, Vincennes, Ind.	10-19
11- 7	Gravel road, Logansport, Ind.	10-26
10- 7	Highways, Lawrenceburg, Ind.	10-26
11- 7	Roads, Paoli, Ind.	10-26
11- 7	Highways, Winamac, Ind.	10-26
11- 7	Gravel road, Washington, Ind.	10-26
11- 7	Road, Madison, Ind.	10-26
11- 8	Gravel roads, Lafayette, Ind.	10-19
11- 8	Paving, Scottsboro, Ala.	10-26
11- 9	Roads, Peru, Ind.	10-19
11- 9*	Street improvements, Blauvelt, N. Y.	10-26
11-10	Gravel road, Brazil, Ind.	10-26
11-13	Paving, Pittston, Pa.	10-19
11-13	Road construction, Wilkes-Barre, Pa.	10-26
11-14	Paving, etc., Pensacola, Fla.	10-19
11-15	Paving, Monmouth, Ill.	10-19
11-15	Grading, Cleveland, Ohio	10-12
11-18	Walks, etc., Annapolis, Md.	10-26

Miscellaneous.

Bids close.		Noted in issue of
10-27	Stable, Fort Riley, Kan.	10-19
10-27	Hydro-electric plant, Panama (U. S. Poss.)	10- 5
10-27*	Canal work, Charleston, S. C.	10- 5
10-27	Bath-house, Cleveland, Ohio.	10-26
10-28	Cable, Washington, D. C.	10-26
10-28	Cement, Spain (Foreign)	10-19
10-30*	Jetty construction, Wilmington, Del.	10- 5
10-30	Dredging, Boston, Mass.	10-26
10-31	Steel pipe, etc., Wash., D.C.	10-26
11- 1*	Subway, etc., Toronto, Ont.	10- 5
11- 2*	Dredging, Bridgeport, Conn.	10-19
11- 2	Field house, New York	10-26
11- 3*	Bricks, gravel, stone, Collingswood, N. J.	10-19
11- 4	Jetty construction, Wilmington, Del.	10-12
11- 6	Pipe, gate-valves, etc., Panama (U. S. Poss.)	10-19
11- 6	Fence, Los Angeles, Cal.	10-19
11- 6*	Jetty construction, Wilmington, Del.	10-12
11- 6*	Harbor work, New York	10-12
11- 6*	Breakwater work, Burlington, Vt.	10-12
11- 7	Copper, etc., Wash., D. C.	10-26
11- 8	Storehouse, Monterey, Cal.	10-19
11- 8*	Water tube boilers, Philippine Islands (U. S. Poss.)	
11- 9	Dredge, Portland, Ore.	10-19
11- 9	Fire-boat, Portland, Ore.	10-19
11- 9	Dredge, Portland, Ore.	10-26
11-10	and 11, storehouse, Hawaii (U. S. Poss.)	9-21
11-10	and 11, Building, Hawaii (U. S. Poss.)	9-21
11-11*	Earth levee, East St. Louis, Ill.	10-12
11-11	Storehouse, Hawaii (U. S. Poss.)	9-21
11-11	Levees, Texarkana, Tex.	10-12
11-13*	Dredging, New York	10-19
11-14	Castings, cylinders, etc., Panama (U. S. Poss.)	9-28
11-14	Bronze, steel, etc., Washington, D. C.	10-26
11-15	Transfer station, New York	10-19
11-17*	Subway superstructure, Saskatoon, Sask.	10-26
11-19	Elec. lighting, Roumania (Foreign)	9-21
11-20*	Pier and bulkhead, Philadelphia, Pa.	10-26
11-20*	Rock excavation, Boston, Mass.	10-26
11-20*	Repairs, to canal walls, Saulte Ste. Marie, Mich.	10-26
11-20	Electric towing locomotives, Panama (U. S. Poss.)	
11-20	Drainage canal, Caruthersville, Mo.	10-19
11-22	Power plant, South Africa (Foreign)	10-19
11-22	Cable, Australia (Foreign)	10-19
11-23*	Barges, Wheeling, W. Va.	10-26
11-24*	Locomotive crane, Memphis, Tenn.	10-26
11-29	Copper wire, etc., Australia (Foreign)	10-19
12- 1*	Pumping machinery, India, (Foreign)	9-21
12- 1	Drainage, Osceola, Ark.	10- 5
12- 4*	Condensers, pumps, etc., Philippine Islands (U. S. Poss.)	10- 5
12- 4	*Engines, generators, etc., Philippine Islands (U. S. Poss.)	9-21
——	Excavation, Shelburne Falls, Mass.	9-2[illegible]
12- 5	Buildings, Porto Rico (U. S. Poss.)	10-19
12-27*	Dredges, San Francisco, Cal.	10- 5
——*	Concrete, Montezuma, N. Y.	10-26

Examinations.

Examination date.		Noted in issue of
11- 2	Examiner of Efficiency, Chicago, Ill.	10-26
11- 3	Statistician, Albany, N. Y.	10-19
11- 4	Foremen of Steelwork Construction, Washington, D. C.	10-26
11-22	Electrical Assistant, Washing, D. C.	10-26
11-22	Editorial Clerk, Washington, D. C.	10-26
14-25	Assistant Mechanical Engineer, Washington, D. C.	10-26

Pacific Coast: J. E. Pinkham Lumber Co., Seattle, Wash., (a) $8.25; Foster Lumber Co., Tacoma, Wash., (a) $8.40, (b) $31.90; The Charles Nelson Co., San Francisco, Cal., (a) $8.70, (b) $10.45; Federal Lumber Co., Cleveland, Ohio, (a) $8.75; Douglas Fir Sales Co., Portland, Ore., (a) $9, (b) $65.21; Tacoma Mill Co., Tacoma, (a) $9.50, (c) $9.50, price based on f. o. b. cars, Pacific Coast; John Schroeder Lumber Co., Milwaukee, Wis., (a) $9.50, (b) $29, (c) $19; R. J. Clark, Sault Ste. Marie, Mich., (a) $9.75, (b) $49.50, (c) $18.45; The Marsh Bingham Co., Chicago, Ill., (a) $10; W. H. Boner, Everett, Wash., (a) $10, (b) $34; G. Elias & Bro., Buffalo, N. Y., (a) $11, (b) $43.84, (c) $19.50; Stearns Salt & Lumber Co., Ludington, Mich., (a) $11.43, (b) $47.43, (c) $16.70; Robinson Lumber, Veneer & Box Co., New Orleans, La., (a) $11.74, (b) $25.65; W. W. Carre Co., Ltd., New Orleans, La., (a) $11.98; Worcester Lumber Co., Ltd., Chassell, Mich., (c) $16.95; W. H. White Co., Boyne City, Mich., (c) $22; Firm Lumber Co., Hattiesburg, Miss., (c) $32.90.

***Repairs to Canal Wall.**—Sault Ste. Marie, Mich.—Bids will be received until 3 p. m., Nov. 20, by Col. C. McD. Townsend, Corps Engrs., U. S. A., Jones Bldg., Detroit, Mich., for repairs to canal walls at Sault Ste. Marie.

Wall.—Saginaw, Mich.—C. K. Eddy & Sons, of Saginaw, it is stated, will construct a retaining wall along their dock for a distance of one-half mile. Estimated cost, $50,000.

Drainage.—Appleton, Wis.—A project is under way to reclaim 2,000 acres of land known as Center Marsh north of here. Gerrit T. Thorn, of Oshkosh, Wis., is interested.

✚Ditch.—Brownsville, Tex.—The contract has been awarded to N. E. RENDALL, of Brownsville, by the Drainage Commissioners for constructing drainage ditches, at $161,000. J. R. Copeland, of Brownsville, is Secy.

Mechanical Equipment.—Bellingham, Wash.—Bids were received as follows Oct. 23, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for furnishing the mechanical equipment at Bellingham, Wash.: J. H. Wiese, South Omaha, Neb., $39,950; Christopher & Blythe, Bellingham, $38,375.

Tugboat.—Portland, Ore.—The bid of Joseph Supple at $25,750 has been recommended for award for constructing a wood hull for the U. S. tug "G. H. Mendell" and constructing machinery therein. Bids were opened on Oct. 9 by Maj. J. F. McIndoe, Corps Engrs., U. S. A., Portland.

Wharf, Jetty Work.—Portland, Ore.—The lowest bid received by Maj. J. J. Morrow, Corps Engrs., U. S. A., Portland, for constructing the receiving wharf and extending the north jetty at the mouth of the Siuslaw River has been submitted by Anderson & Johnson of Portland.

✚Pier.—Del Mar, Cal.—The South Coast Land Co., of San Diego, Cal., has awarded the contract to CHARLES STEFFGEN, of San Diego, for the construction of an 800-ft. pleasure pier at Del Mar.

✚Dormitory.—San Francisco, Cal.—The contract for the construction of a frame dormitory at the Hoopa Valley Indian School, Cal., has been awarded to WILLIAM BRUCE, San Francisco, at $14,900.

Piles and Timbers.—Los Angeles, Cal.—Bids will be received until 2 p. m., Nov. 10, by the Board of Public Works for furnishing creosoted piles and timbers. Horace B. Ferris is Secy.

Bulkhead Wall.—Oakland, Cal.—The City Council has received bids for the construction of a bulkhead retaining wall in the Key Route Basin for the protection of a portion of the solid fill built across the basin from the Southern Pacific mole to the Key Route mole, as follows: Mercer-Fraser Co., $14.85 per lin. ft.; Mervey-Elwell Co., Oakland, $13.50; Burwell Bridge & Construction Co., $14.90; Cotton Bros. Co., $14.95; Healy-Tibbitts Construction Co., $14.20; Hyde, Harjes & Co., $14. Noted on Oct. 19.

Tunnel.—Montreal, Que.—It is reported that the Canadian Northern Tunnel & Terminal Co., a subsidiary of the Canadian Northern Ry. Co., T. Turnbull, Asst. Ch. Engr., Winnipeg, Man., has announced that it has perfected plans for tunneling under Mount Royal to effect an entrance into the heart of the city of Montreal. The company's announcement, it is stated, was in the form of a notice that it would apply to Parliament for authority to construct and operate a railway tunnel under Mount Royal. The estimated cost of the tunnel and terminal is $25,000,000. It will be three miles long and construction work will begin next spring.

✚Breakwater.—Port Stanley Ont.—M. J. HOGAN, of Port Colborne, has been awarded the contract by the Department of Public Works, Ottawa, R. C. Desrochers, Secy., for constructing the new breakwater here.

Drydock.—St. John, N. B.—The Dominion Government, it is reported, has deferred the award of contract for the proposed drydock, breakwater and wharves at St. John, and will refer the matter to the incoming administration. The lowest bid received for this work was submitted, it is stated, by the Norton-Griffiths Steel Construction Co., Dominion Trust Bldg., Vancouver, B. C., at about $3,000,000.

***Subway Superstructure.**—Saskatoon, Sask.—Bids will be received until noon, Nov. 17, by the City Commissioners, for furnishing and erection of the superstructure over the 19th St. Subway. Plans and specifications may be seen at the office of W. L. MacKenzie, Bridge Engr., Canadian Northern Ry., Winnipeg; at the office of George T. Clark, City Engr., and at the office of The Canadian Engineer, Toronto and Montreal.

✚Drydock and Repair Plant.—Sydney, N. S.—The contract for the drydock and repair plant at Sydney, N. S., to be built with the assistance of a Government subsidy, has been awarded, it is reported, to the BRITISH CANADIAN CO., LTD., organized with a capital of $10,000,000. Sir Henry Pellatt, Toronto, is the president of the new company, which was also the lowest bidder for the construction of the new cruisers for the Canadian Navy.

Tramway.—Zapote, (Sonora) Mex.—The Palmarejo & Mexican Gold Fields, Ltd., will construct an aerial tramway about five miles long to connect its mines with its new mill at Zapote. Geo. E. Stevenson, of Zapote, is Resident Mgr.

U. S. POSSESSIONS AND CUBA.

Hydroelectric Plant.—Panama.—Bids were received as follows, on Oct. 24, by the General Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for installing a hydroelectric plant at the Gatum Dam, Panama: Class 1, item (1) three water turbines (2,250-KW. capacity); item (2) three governors, item (3) three head gates, item (4) three penstocks, item (5) three compressed-air regulators, item (6) one lubricating system. Class 2, item (1) three electric generators of 2,500-KVA. (2,000-KW. capacity), item (2), three exciters of 50-KW. capacity, item (3), two motor-driven exciter sets of 100-KW. capacity. Class 3, one 20-ton 3-motor traveling crane: Cleveland Crane & Engineering Co., Wickliffe, Ohio, Class 3, $4,000 to $4,390; Miles-Bement-Pond Co., 111 Broadway, New York, Class 3, $4,310 to $5,231; Whiting Foundry & Equipment Co., Harvey, Ill., Class 3, $4,174 to $5,447; Pelton Water Wheel Co., 90 West St., New York, Class 1, total, $92,800; item (1), $51,000; alternates, $43,500, $45,000, $43,200; item (2), $7,200; alternates, $7,050; item (3), $6,550; item (4), $20,250; item (5), $4,650; Platt Iron Works, Dayton, Ohio, (by receiver) Class 1, totals $92,346; $91,028; $100,831; Item (1) $45,843; $44,450; $27,288; Item (2) $7,042; $7,020; Item (3) $12,365; Item (4) $21,000; $55,436; Item (5) $2,935; Item (6) $8,030. Morgan Smith Co., York, Pa. Class 1, Item (1) $20,298 each; $72,100; $71,000; $55,600; Item (2) $7,980; $7,310; Item (3) $5,246; $5,036; Item (4) $29,350; $29,400; $29,200; $70,200; $71,600; $71,300; $70,900; Item (5) $5,750; Item (6) $2,948; $2,053. General Electric Co., Schenectady, N. Y., Class 2, Item (1) $43,682; $40,575; $45,281; $39,628; $38,949; $43,906; $44,863; Item (2), $3,661; $3,321; $4,407; $3,342; $3,118; $4,180; $2,861; Item (3) $6,010. Westinghouse Electric & Mfg. Co., Washington, D. C., Class 2, Item (1) $38,484; $48,539; $50,453; $36,370; $44,353; $47,116; Item (2) $2,677; $2,995; $3,355; $2,679; $2,995; $3,355; Item (3) $6,190; totals, $42,872; $52,186; $54,152; $40,749; $48,172; $50,274. Allis-Chalmers Co., Milwaukee, Wis., Class 2, Item (1) $72,300; $71,700; Item (2) $3,180; Item (3) $6,040. As indicated each bidder bid on a series of alternate propositions in addition to the regular bid.

CONTRACT PRICES.

Sewers.—Fairfield, Iowa.—Bids were received Oct. 14 for constructing two sewerage disposal plants and sewers, according to plans prepared by Hall & Adams, Engrs., Centerville, Iowa. The bidders were as follows: (A) Geo. B. Inman, Kansas City, Mo.; (B) J. W. Smith & Son, Oklahoma City, Okla.; (C) Spaulding & Kearns, Fairfield, Iowa; (D) Burlington Construction Co., Burlington, Iowa; (E) Hoar-Parkinson, Iowa City, Iowa; (F) C. R. McKay, Omaha, Neb.; (G) Lanyon & Clifford, Waukegan, Ill.; (H) McGuire-Stanton Construction Co., Leavenworth, Kan., (I) John Brogan, Green Bay, Wis.; (J) Lana Construction Co., Harlan, Iowa; (K) Lytle Construction Co., Sioux City, Iowa.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Disposal Plants:											
Settling tanks dosing N. E. outlet	$3,307.00	$3,800.00	$3,321.00	$3,000.00	......	......	......	$3,400.00	$3,600.00	$1,900.00	$3,150.00
Filter beds, N. E. outlet	3,750.00	5,200.00	5,522.50	4,250.00	......	......	......	4,100.00	5,000.00	2,073.00	4,375.00
Sludge bed, N. E. outlet	232.00	250.00	200.00	250.00	......	......	......	150.00	300.00	200.00	308.00
Settling tanks, dosing S. E outlet	3.307.00	3.800.00	3,321.00	3,000.00	......	......	......	3.400.00	3,600.00	1,900.00	3,150.00
Filter beds, S. E. outlet	3,750.00	5.200.00	5,297.50	4,250.00	......	......	......	4,000,00	5,000.00	2,075.00	4,390.00
Sludge bed, S. E. outlet	232.00	250.00	200.00	250.00	......	......	......	150.00	300.00	200.00	310.00
Outlets:											
125 lin. ft. 10-in. 0 ft. - 4 ft. deep	......	.42	.42	.40	.45	.45	.43	.36	.35	.30	.34
160 lin. ft. 10-in. 4 ft. - 6 ft. deep	......	.51	.50	.40	.48	.52	.50	.39	.40	.30	.36
187 lin. ft. 10-in. 6 ft. - 8 ft. deep	......	.58	.60	.40	.60	.63	.55	.48	.45	.45	.47
607 lin. ft. 10-in. 8 ft. - 10 ft. deep	......	.67	.75	.65	.80	.69	.60	.61	.50	.65	.66
205 lin. ft. 10-in. 10 ft. - 12 ft. deep	......	.76	.95	.87½	1.00	.75	.70	.76	.55	.85	.87
206 lin. ft. 10-in. 12 ft. - 14 ft. deep	......	.98	1.30	1.10	1.00	1.10	.80	1.00	.60	1.05	1.05
838 lin. ft. 12-in. 0 ft. - 4 ft. deep	......	.52	.45	.45	.55	.50	.45	.46	.40	.35	.36
1,066 lin. ft. 12-in. 4 ft. - 6 ft. deep	......	.56	.55	.45	.60	.59	.50	.48	.48	.40	.41
1,625 lin. ft. 12-in. 6 ft. - 8 ft. deep	......	.63	.70	.45	.75	.68	.55	.56	.55	.55	.56
2,011 lin. ft. 12-in. 8 ft. - 10 ft. deep	......	.70	.90	.75	.80	.75	.60	.70	.65	.70	.71
1,191 lin. ft. 12-in. 10 ft. - 12 ft. deep	......	.81	1.15	1.00	1.05	.85	.70	.90	.75	.95	.98
691 lin. ft. 12-in. 12 ft. - 14 ft. deep	......	1.03	1.35	1.10	1.25	1.10	.85	1.10	.85	1.15	1.20
332 lin. ft. 12-in. 14 ft. - 16 ft. deep	......	1.50	1.60	1.30	1.40	1.20	1.25	1.34	.95	1.30	1.40
375 lin. ft. 12-in. 16 ft. - 18 ft. deep	......	1.65	1.95	1.50	1.75	1.40	1.75	1.55	1.00	1.55	1.57
140 lin. ft. 12-in. 18 ft. - 20 ft. deep	......	2.40	2.20	1.75	2.00	1.85	2.25	1.85	1.00	1.80	1.98
148 lin. ft. 12-in. 20 ft. - 22 ft. deep	......	2.65	2.50	2.25	2.00	2.00	3.50	2.34	1.00	2.30	3.50
95 lin. ft. 10-in. c.-i. pipe	......	1.80	2.50	2.50	3.50	2.90	1.50	1.50	1.10	2.00	2.50
132 lin. ft. 12-in. c.-i. pipe	......	2.40	3.00	3.00	3.50	3.10	1.75	2.30	1.40	3.00	3.75
75 lin. ft. piers vitrified pipe	......	1.90	1.20	2.00	1.50	2.50	.75	1.00	2.50	2.00	4.00
21 cu. yds. concrete	......	8.50	7.00	8.00	10.00	8.00	8.00	8.00	5.00	10.00	11.50
180 cu. yds. embankment	......	.35	.40	.50	.40	.40	.50	.40	.30	.50	.45
30 ft. 15-in. under embankment	......	.60	1.80	.75	1.50	1.00	.60	.80	.50	.50	.50
1 combined manhole-flush tank	......	84.00	125.00	100.00	70.00	100.00	75.00	100.00	110.00	125.00	120.00
23 regular manholes	......	37.00	45.00	45.00	30.00	38.00	25.00	30.00	44.00	43.00	46.00
4 drop manholes	......	44.00	55.00	55.00	45.00	44.00	35.00	35.00	50.00	55.00	54.00
Laterals—Sec. 3:											
482 lin. ft. 6-in. vitrified pipe	......	.40	......	.50	......	......	.45	.40	.27	.50	.43
27,186 lin. ft. 8-in. vitrified pipe	......	.51	......	.58.4	......	......	.55	.50	.42	.50.9	.61
1,876 lin. ft. 10-in. vitrified pipe	......	.53	......	.70	......	......	.80	.62	.57	.65	.67
663 lin. ft. 12-in. vitrified pipe	......	.60	......	.80	......	......	.90	.84	.62	.80	.78
120 lin. ft. 8-in. c.-i. pipe	......	1.20	......	2.00	......	......	2.75	1.25	2.00	1.75	2.00
50 lin. ft. 10-in. c.-i. pipe	......	1.80	......	2.50	......	......	3.25	2.00	2.00	2.00	2.30
61 regular manholes	......	38.00	......	40.00	......	......	25.00	30.00	42.00	40.00	39.00
10 drop manholes	......	44.00	......	50.00	......	......	35.00	35.00	45.00	50.00	49.00
23 flush tanks	......	66.00	......	70.00	......	......	45.00	65.00	70.00	70.00	75.00
10 lamp holes	......	6.00	......	10.00	......	......	5.00	5.00	5.00	10.00	9.00
Section 4:											
1,926 lin. ft. 8-in. vitrified pipe	......	.51	......	.58.4	......	......	.55	.50	.42	.50.9	.61
22,933 lin. ft. 10-in. vitrified pipe	......	.53	......	.70	......	......	.65	.62	.52	.65	.69
44 regular manholes	......	38.00	......	40.00	......	......	25.00	30.00	44.00	40.00	39.00
2 drop manholes	......	44.00	......	50.00	......	......	35.00	35.00	50.00	50.00	49.00
1 combined manhole and flush tank	......	100.00	......	125.00	......	......	75.00	100.00	110.00	100.00	120.00
19 flush tanks	......	66.00	......	70.00	......	......	45.00	65.00	73.00	70.00	75.00
3 lamp holes	......	6.00	......	10.00	......	......	5.00	5.00	5.00	10.00	9.00
Section 5:											
17,063 lin. ft. 8-in. vitrified pipe	......	.51	......	.58.4	......	......	.55	.50	.42	.50.9	.61
511 lin. ft. 10-in. vitrified pipe	......	.53	......	.70	......	......	.85	.62	.62	.65	.65
2,294 lin. ft. 12-in. vitrified pipe	......	.60	......	.80	......	......	.90	.90	.72	.80	.78
35 regular manholes	......	38.00	......	40.00	......	......	25.00	30.00	44.00	40.00	39.00
7 drop manholes	......	44.00	......	50.00	......	......	35.00	35.00	50.00	50.00	49.00
19 flush tanks	......	66.00	......	70.00	......	......	45.00	65.00	70.00	70.00	75.00
1 lamp hole	......	6.00	......	10.00	......	......	5.00	5.00	5.00	10.00	9.00
Totals	$14,578.00	$76,650.50	$29,654.75	$78,998.63	$11,054.85	$10,262.68	$58,218.45	$72,136.33	$70,160.13	$68,058.36	$83,396.20

EXAMINATIONS.

Expert on System and Organization.—Chicago, Ill.—The examination held on Oct. 26, for the position of Expert on System and Organization, Grade IV, Engineering Service, noted on Oct. 19, has been postponed.

Editorial Clerk.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Nov. 22-23, to secure eligibles from which to make certification to fill vacancies as they may occur in the position of Editorial Clerk at salaries ranging from $900 to $1,400 a year. The examination will consist of the subjects mentioned below, weighted as indicated: Spelling, 3 points; Arithmetic, 3 points; Penmanship, 3 points; Report writing, 6 points; Copying and correcting manuscript, 5 points; Editing and abstracting, 40 points; Proof reading, bookmaking, and indexing, 40 points. Applicants must have reached their 20th birthday. Examination form 1312.

Assistant Mechanical Engineer.—Washington, D. C.—The U. S. Civil Service Commission announces an examination to be held Nov. 25, to secure eligibles from which to make certification to fill a vacancy in the position of Assistant Mechanical Engineer in the Bureau of Mines, at a salary of from $2,000 to $2,750 a year. The duties of the person appointed to this position will be to assist and participate in the investigations of mechanical engineering subjects connected with the mining industry, especially along lines relating to haulage and hoisting equipment. Headquarters will be at Pittsburgh, Pa., but the nature of the duties will involve considerable field work which will require the assistant mechanical engineer to travel extensively over the United States. The examination will consist of the subjects mentioned below, weighted as indicated: General education and technical training, 40 points; Profession and technical experience and fitness, 40 points; Publications and official reports, or thesis, 20 points. Applicants must have reached their 25th, but not their [illegible] birthday. Examination form 30[illegible] [illegible] special form.

INDUSTRIAL NOTES.

Census Report of Manufacturers.—According to the thirteenth United States Census Report, as issued by Census Director Durand, the total value of the manufacturing industry in the United States is $20,672,052,000. This is an increase of 40% over the previous census.

The capital invested increased 45%; the gross value of product, 40%; cost of materials, 43%; value added by manufacture, 36%; average number of wage earners employed, 21%; amount paid in wages, 31%; number of salaried officials and clerks, 52%; amount paid in salaries, 63%; miscellaneous expenses 34%.

In the number of manufacturing establishments a gain of 24% is noted as there were 268,491 factories in 1909 as against 216,180 in 1904.

There was a gain of $5,752.689,000 in capital investment. The total capital in 1909 was $18,428,270,000 while there was only $12,675,581,000 in 1904. The average capital per establishment was approximately $69,000 in 1909.

In the matter of cost of materials, however, it must be taken into consideration that there has been an increase in price of general commodities in all branches of trade during the last five years and it has made no exception in the manufacturing trade. A rise in the price of materials used, therefore, would not denote a corresponding rise in the amount of business and profits.

The cost of materials in 1909 was $12,141,291,000 as against $8.500,208,000 in 1904, an increase of 43%. These figures include expenses such as fuel, power, heat and mill supplies.

The comparative summary for the United States in 1909 and 1904 is as follows:

	Census	
	1909.	1904.
No. of establishments	268,491	216,180
Capital	$18,428,270,000	$12,675,581,000
Cost of materials used	12,141,291,000	8,500,208,000
Salaries and wages, total	4,365,613,000	3,184,884,000
Miscellaneous expenses	1,945,676,000	1,453,168,000
Value of products	20,672,052,000	14,793,903,000
Value added by manufacture (products less cost of materials)	8,530,761,000	6,293,695,000
Employes—		
Number of salaried officials & clerks	790,267	519,556
Average number of wage earners employed during the year	6,615,046	5,468,383
Primary horsepower	18,680,776	13,487,707

The Marion Shovel & Dredge Co., Marion, Ohio, announces that it has bought the business and good will of the Osgood Dredge Co., Albany, N. Y., and that the two companies will consolidate under the name of "The Marion-Osgood Co.," Marion, Ohio. The eastern office will be located at 51 State St., Albany, N. Y.

Burke & Venable, Cincinnati, Ohio, announce the dissolution of their partnership as consulting engineers to enable Mr. Venable to devote all of his time to the interest of the Blaw-Collapsible Steel Centering Co., Pittsburgh. Mr. Burke will continue the business at the present office in the Second Nat. Bank Bldg., Cincinnati, Ohio.

Mr. C. D. Chasteney has resigned his position as Sales Manager of De Laval Steam Turbine Co., of Trenton, N. J., having acquired an interest in the Turbine Equipment Co., 30 Church St., New York, which company represents the De Laval Steam Turbine Co. in New York State and parts of New Jersey and Connecticut. Mr. Chasteney has been with the De Laval Steam Turbine Co. since the organization of the American company about ten years ago.

A record for rapid work was made early this year by the Lima Locomotive & Machine Co., Lima, Ohio, which is especially notable because this company has made a specialty of manufacturing geared locomotives. An order was placed by the Chicago & Western Indiana R. R., on Nov. 7, 1910, for 10 switching locomotives, having 24 × 28-in. cylinders, eight wheels, weighing 201,000 lbs. on drivers. These were delivered in February and March this year or on the exact schedule time.

The Lyons Boiler Works, De Pere, Wis., have been awarded the following contracts: Four 400-HP. boilers for the Rand-McNally Bldg., Chicago; three 200-HP. boilers for the Woodmen of the World Bldg., Omaha; one 300-HP. boiler for the Wolf River Paper & Fibre Co., Shawano; one 250-HP. boiler for the Spalding Hotel, Duluth; one 150-HP. boiler for the King County Hospital, Seattle; one 145-HP. boiler for the Walter Bros. Brewing Co., Menasha; two 200-HP. boilers for the Chicago, Burlington & Quincy R. R. Co., and one boiler for the steamer "Cotton Blossom," Mount Pleasant, W. Va.

TRADE PUBLICATIONS.

VITRIFIED CLAY PIPE.—Clay Products Publicity Bureau, Kansas City, Mo. Paper; 5 × 8 ins.; pp. 64; illustrated; and 11 × 7½ ins.; pp. 48; illustrated.

The first of these pamphlets is designed to give information about sewer design and construction. Tables are given showing the total and per capita consumption of water in some of our larger cities, discharge from 4 to 36-in. vitrified pipe sewers on grades 0.1 to 0.0002 and discharge from brick and concrete sewers 24 to 72 ins. in diameter on grades 0.05 to 0.00012. Several pages are devoted to argument that vitrified clay pipe is much better than concrete pipe for sewers; in support of which, numerous illustrations are included showing concrete sewers which have failed. The larger pamphlet is largely made of similar illustrations. The text gives the results of various experiments showing the disintegrating effect of acids and alkali on concrete and cement.

ADVANCE NEWS is always wanted for our CONSTRUCTION NEWS and our readers are often in a position to send us such items.

We ask to be kept informed of new work

Improvement Work Contemplated.

Although a slight decrease in activity in almost all lines of construction work is noticeable, bids, exclusive of those noted in this issue, will be received during the next two weeks for many large contracts. Among the more important of these, including both city and government work, the following are noted:

The Board of Public Works of Saginaw, Mich., will consider estimates on Oct. 27 for the erection of a bridge across the Saginaw River. On the same date contractors will be required to file their bids with the Board of Public Works of Kansas City, Mo., for an ornamental reinforced-concrete arch bridge over Bush Creek. At Angleton, Tex., Nov. 1 is the closing date for bids for materials and labor for two bridges to be constructed in Brazoria County.

Proposals for Contract 75, a water supply contract of no small magnitude, will be opened by the New York Board of Water Supply on Oct. 31. This work is for the Bay Ridge Conduit and includes furnishing and laying about 16,430 ft. of 48-in. c.-i. pipe. The Board of City Commissioners of Jellico, Tenn., have advertised for bids until Nov. 1 for a gravity water system and pipe sewers; the Medina Irrigation Co., of San Antonio, Tex., will open bids on Oct. 30 for constructing its West Canal and subsidiary structures; and the U. S. Reclamation Service at Boise, Idaho, will consider propositions on Nov. 1 for lateral headgates for the Boise Project.

The cities of Summerville, Ga., and Ligonier, Pa., have selected Oct. 30 and Nov. 2, respectively, as the closing dates for bids for sewers and disposal plants.

Bids for several large contracts for pavements and road work will be opened at Collingswood, N. J., on Nov. 3; at Brandon, Miss., Nov. 6; and at Pine Bluff, Ark., Nov. 1. The contracts at Collingswood and Pine Bluff call for macadam and treated wood-block pavements, and that at Brandon for improving about 65 miles of public roads in Rankin County.

Contracts of a miscellaneous nature soon to be let include calls for bids to be opened at Wilmington, Del., on Oct. 30 by the U. S Engineer for jetty construction; at Crowley, La., on Oct. 28, for 40 miles of open ditches; and at Charleston, S. C., on Oct. 27, for dredging.

In Canada, at Toronto, Ont., on Nov. 1, the Board of Control will receive bids for the construction of two miles of reinforced-concrete subway and subway stations.

Miscellaneous Wants

AGENCY Wanted: A mechanical engineer desires to represent in Chicago a manufacturing firm; has previously represented in this city a leading eastern iron house. Address "F. B. 17," Engineering News, New York. 17-1t

For other Proposal Advertisements see pages
49, 50, 52, 5[illegible]
of Advertisements and Construction News, page [illegible]8

ROADS, ETC.

Blauvelt, N. Y.

Sealed proposals for new roads and grading at the New York State Rifle Range, Blauvelt, N. Y., will be received by the State Board of Armory Commissioners, 174 State Street, Albany, N. Y., until twelve o'clock noon on Thursday, November 9th, 1911, when they will be opened and read publicly.

Proposals shall be accompanied by a certified check in the sum of five per cent. of the amount of bid, and the contractor to whom the award is made shall be required to furnish surety company's bond in the sum of fifty per cent. of the amount of contract, within thirty days after notice of award of contract and in accordance with the terms of specification No. 1453. The right is reserved to reject any or all bids.

Drawings and specifications may be consulted and blank forms of proposal obtained at the New York State Rifle Range, Blauvelt, N. Y., and at the office of the State Architect. Complete sets of plans and specifications will be furnished to prospective bidders upon reasonable notice to and in the discretion of the State Architect, Franklin B. Ware, Albany, N. Y.

STATE ARMORY COMMISSION,
F. A. McNEELY, Secretary,
174 State St., Albany, N. Y.

Situations Wanted

Civil Engineers

YOUNG engineer wishes employment after December 1st; technical education; five and one-half years' experience on railroad preliminary, location and construction, and nine months railroad valuation; first-class field and office man, estimates, reports and inspection; moderate salary; first-class references; location immaterial. T. A. THOMPSON, 21 Prospect Place, Brooklyn, N. Y. 17-3t

Draftsmen

DRAFTSMAN, structural, technical graduate, experienced beam detailer, wishes position; moderate salary. Address "E. B. 17," Engineering News, New York. 17-2t

Situations Open
(Or Vacant)

WANTED—Designer for manganese steel special track work; give detailed experience and salary expected. Address "D. B. 17," Engineering News, New York. 17-2t

DRAFTSMAN for structural steel work; should have two or three years' experience; some knowledge of skew work essential; technical graduate preferred. Apply by mail only. EARL C. MAXWELL, 143 Liberty St., New York. 17-1t

Please Mention ENGINEERING NEWS

Important Books on Road Construction and Maintenance

City Roads and Pavements
Suited for Cities of Moderate Size
By William Pierson Judson
M. Am. Soc. C. E.
Fourth Edition, Revised and Enlarged, 1909.

This book fills the need for a short, concise treatise on the present practice among cities relative to the laying of pavements, what kinds of pavements are most favored, and how different kinds of paving materials are wearing. It treats the subject concisely and liberally, giving well illustrated and up to date descriptions of the various kinds of pavements in practical use, with costs of laying and maintenance, and many statistics for cities and localities all over the United States, and references to European practice and experience.

Cloth; 6 × 9 inches; 197 pages; 69 illustrations.
Price, $2.00, net.

Road Preservation and Dust Prevention
By William Pierson Judson
M. Am. Soc. C. E.; M. Inst. C. E.
Author of "City Roads and Pavements."

The preservation of surface and the prevention of dust on macadamized roads are matters which are most urgent, and road builders have been working and experimenting to these ends with results which are here for the first time compiled in book form.

The book deals with Road Dust—Its Control and Prevention; Moisture; Oil Emulsions; Oils; Coal Tar Preparations; Tar-Spraying Machines; Tar-Macadam; Rock Asphalt Macadam; Bitulithic Pavements and

Gives Methods, Costs, Results, Tests, etc.
A necessary and timely book for every engineer
Cloth; 6 × 9 inches; 144 pages; 16 illustrations.
Price, $1.50, net.

Economics of Road Construction
By H. P. Gillette
SECOND EDITION, ENLARGED.
Cloth; 6 × 9 inches; 48 pages; 9 illustrations.
Price, $1.00, net.

Specifications for Street Roadway Pavements
By S. Whinery
M. Am. Soc. C. E.

These specifications have been prepared by one of the foremost authorities on road construction and embody the results of extended experience and expert observation. Every city engineer, consultant and contractor having to deal with urban highway improvements will find this work of inestimable value, and should lose no time in procuring a copy.

Paper; 6 × 9 inches; 56 pages.
Price, 50 cents, net.

Complete details of these and other books will be sent on request

The Engineering News Publishing Co., 220 Broadway, New York City